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FILE COVERS 1907 - 4 Jan 2010 VOL 152 ISS 2
FILE LAST UPDATED: 3 Jan 2010 (20100103/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Oct 2009

CAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2009.

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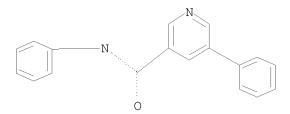
http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

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Structure attributes must be viewed using STN Express query preparation.

L3 208 SEA FILE=REGISTRY SSS FUL L1

L4 37 SEA FILE=CAPLUS L3

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L4 ANSWER 1 OF 37 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2009:944279 CAPLUS

DOCUMENT NUMBER: 151:220846

TITLE: Preparation of (phenoxy)phenylalkanoic acid

derivatives as CRTH2 antagonists for treatment of

inflammatory diseases

INVENTOR(S):
Terasaka, Tadashi; Matsuda, Hiroshi; Ito, Shinji;

Tasaki, Mamoru

PATENT ASSIGNEE(S): Astellas Pharma Inc., Japan

SOURCE: PCT Int. Appl., 117pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	CENT	NO.			KIN	D	DATE			APPL	ICAT	ION I	NO.		D	ATE	
 WO	 2009	 0965	 26		A1	_	2009	 0806	,	 WO 2		JP51.			2	0090	130
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		CA,	CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,
		FI,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,
		KG,	KM,	KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,
		ME,	MG,	MK,	MN,	MW,	MX,	MY,	MΖ,	NA,	NG,	NΙ,	NO,	NΖ,	OM,	PG,	PH,
		PL,	PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	ST,	SV,	SY,	ТJ,
		TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW		
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HR,	HU,
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		SK,	TR,	BF,	ΒJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,
		TD,	ΤG,	BW,	GH,	GM,	KΕ,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,
		ZW,	ΑM,	ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM						
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OTHER SOURCE(S): MARPAT 151:220846

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The title compds. I [R1 = (alkylene)-CO2H, H; when R1 is (alkylene)-CO2H, AΒ R2 is halo, H, and R3 is halo, alkyl, H, etc.; when R1 is H, R2 and R3 together with the benzene ring (to which R2 and R3 are connected) form Q1; A1 = (CH2)m; V = CH, N; m = integer from 1 to 6; <math>R4 = halo, H; when R3 is H, R4 is halo; R5 = H, halo, alkyl; R6 = (un)substituted aryl, heteroaryl, heterocycloalkyl, etc.; A = O, S; D = CO, SO2; E = bond, alkylene, alkenylene; Y = CR5a, N; R5a = H, halo, alkyl; Z = CH, N; U = CR5b, N; R5b = H, halo, alkyl; (a proviso specifying that 7 specific compds. are excluded is given)] are prepared Thus, (3-chloro-4-(4-[(3,4-dichlorobenzoyl)amino]phenoxy)phenyl)acetic acid (II) was prepared in a 2-step process starting from

(4-(4-aminophenoxy)-3-chlorophenyl)acetic acid Et ester and

3,4-dichlorobenzoic acid. II showed IC50 value of $9.1\ \mathrm{nM}$ in a CRTH2 binding assay.

IT 1175651-33-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of (phenoxy)phenylalkanoic acid derivs. as CRTH2 antagonists for treatment of inflammatory diseases)

RN 1175651-33-8 CAPLUS

CN Benzeneacetic acid, 3-chloro-4-[4-[[(5-phenyl-3-pyridinyl)carbonyl]amino]phenoxy]- (CA INDEX NAME)

IT 1175654-73-5P

CORPORATE SOURCE:

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of (phenoxy)phenylalkanoic acid derivs. as CRTH2 antagonists for treatment of inflammatory diseases)

RN 1175654-73-5 CAPLUS

CN Benzeneacetic acid, 3-chloro-4-[4-[[(5-phenyl-3-pyridinyl)carbonyl]amino]phenoxy]-, ethyl ester (CA INDEX NAME)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 37 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2009:695123 CAPLUS

DOCUMENT NUMBER: 151:211345

TITLE: Identification of 2-aminobenzimidazoles as potent

melanin-concentrating hormone 1-receptor (MCH1R)

antagonists

AUTHOR(S): Moriya, Minoru; Kishino, Hiroyuki; Sakuraba, Shunji;

Sakamoto, Toshihiro; Suga, Takuya; Takahashi,

Hidekazu; Suzuki, Takao; Ito, Masahiko; Ito, Junko; Moriya, Ryuichi; Takenaga, Norihiro; Iwaasa, Hisashi; Ishihara, Akane; Kanatani, Akio; Fukami, Takehiro Tsukuba Research Institute, Banyu Pharmaceutical Co.,

Ltd, Okubo-3, Tsukuba, Ibaraki, 300-2611, Japan

SOURCE: Bioorganic & Medicinal Chemistry Letters (2009),

10/537,719

PUBLISHER:

19(13), 3568-3572

CODEN: BMCLE8; ISSN: 0960-894X

Elsevier B.V.

DOCUMENT TYPE: Journal LANGUAGE: English

GΙ

Ι

AB A series of 2-aminobenzimidazole-based MCH1R antagonists was identified by core replacement of the aminoquinoline lead 1. Subsequent modification of the 2- and 5-positions led to improvement in potency and intrinsic clearance. Compound 25 (I) exhibited good plasma and brain exposure, and attenuated MCH induced food intake at 30 mg/kg PO in rats.

(aminobenzimidazoles as melanin-concentrating hormone 1-receptor antagonists)

RN 1174936-18-5 CAPLUS

CN 3-Pyridinecarboxamide, 5-(4-fluorophenyl)-N-[2-[methyl(1-methylethyl)amino]-1H-benzimidazol-6-yl]- (CA INDEX NAME)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 37 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2009:594820 CAPLUS

DOCUMENT NUMBER: 151:23967

TITLE: Identifying Novel Molecular Structures for Advanced

Melanoma by Ligand-Based Virtual Screening

AUTHOR(S): Wang, Zhao; Lu, Yan; Seibel, William; Miller, Duane

D.; Li, Wei

CORPORATE SOURCE: Department of Pharmaceutical Sciences, College of

Pharmacy, University of Tennessee Health Science

Center, Memphis, TN, 38163, USA

SOURCE: Journal of Chemical Information and Modeling (2009),

49(6), 1420-1427

CODEN: JCISD8; ISSN: 1549-9596

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

AB We recently discovered a new class of thiazole analogs that are highly potent against melanoma cells. To expand the structure-activity relationship study and to explore potential new mol. scaffolds, we performed extensive ligand-based virtual screening against a compound library containing 342 910 small mols. Two different approaches of virtual screening were carried out using the structure of our lead mol.: (1) connectivity-based search using Scitegic Pipeline Pilot from Accelerys and (2) mol. shape similarity search using Schrodinger software. Using a testing compound library, both approaches can rank similar compds. very high and rank dissimilar compds. very low, thus validating our screening methods. Structures identified from these searches were analyzed, and selected compds. were tested in vitro to assess their activity against melanoma cancer cell lines. Several mols. showed good anticancer activity. While none of the identified compds. showed better activity than our lead compound, they provided important insight into structural modifications for our lead compound and also provided novel platforms on which we can optimize new classes of anticancer compds. One of the newly synthesized analogs based on this virtual screening has improved potency and selectivity against melanoma.

IT 1160108-27-9

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(identifying mol. structures for advanced melanoma by ligand-based virtual screening)

RN 1160108-27-9 CAPLUS

CN 3-Pyridinecarboxamide, N-[[4-(aminomethyl)phenyl]methyl]-5-[4-(1-methylethyl)phenyl]-N-(3,4,5-trimethoxyphenyl)- (CA INDEX NAME)

$$\begin{array}{c|c} & \text{H}_2\text{N}-\text{CH}_2 & \text{i-Pr} \\ & \text{CH}_2 & \\ & \text{MeO} & \\ & \text{N}-\text{C} & \\ & \text{N} & \\ & \text{O} & \\ & \text{OMe} & \\ \end{array}$$

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 4 OF 37 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2008:1536622 CAPLUS

DOCUMENT NUMBER: 150:77670

Preparation of 2-phenylthiazolo[5,4-b]pyridine TITLE:

derivatives as sirtuin modulators

Bemis, Jean; Disch, Jeremy S.; Ng, Pui Yee; Oalmann, INVENTOR(S):

Christopher; Perni, Robert B.; Vu, Chi B.

PATENT ASSIGNEE(S): Sirtris Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 118pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATEN	N TV	ο.			KINI)	DATE			APPL:	ICAT	ION I	NO.			ATE	
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AΒ Title compds. represented by the formula I [wherein two of X1-X4 are selected from -CR- and -N-; the other two of X1-X4 are -CR-; R = independently H, halo or alkyl; R1 = a solubilizing group; R2 = (un) substituted Ph or heterocyclyl; or their salts thereof] were prepared as sirtuin modulators, especially SIRT1 modulators. For example, II was provided in a multi-step synthesis starting from the reaction of 5-amino-6-chloro-3-picoline with 2-nitrobenzoyl chloride. I were tested for inhibition of sirtuin activity. I may be used for increasing the lifespan of a cell, and treating and/or preventing a wide variety of diseases and disorders including, for example, diseases or disorders related to aging or stress, diabetes, obesity, neurodegenerative diseases, cardiovascular disease, blood clotting disorders, inflammation, cancer, and/or flushing as well as diseases or disorders that would benefit from increased mitochondrial activity. Also provided are compns. comprising a sirtuin-modulating compound in combination with another therapeutic agent.

IT 1093623-32-5P 1093623-39-2P 1093623-55-2P 1093623-56-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 2-phenylthiazolo[5,4-b]pyridine derivs. as sirtuin modulators)

RN 1093623-32-5 CAPLUS

CN 3-Pyridinecarboxamide, N-[2-[6-[[(1-methylethyl)amino]methyl]thiazolo[5,4-b]pyridin-2-yl]phenyl]-5-phenyl- (CA INDEX NAME)

RN 1093623-39-2 CAPLUS

CN 3-Pyridinecarboxamide, N-[2-[6-[[4-(2-methoxyethyl)-1-piperazinyl]methyl]thiazolo[5,4-b]pyridin-2-yl]phenyl]-5-phenyl- (CA INDEX NAME)

RN 1093623-55-2 CAPLUS

CN 3-Pyridinecarboxamide, 5-(2-fluorophenyl)-N-[2-[6-(4-morpholinylmethyl)thiazolo[5,4-b]pyridin-2-yl]phenyl]- (CA INDEX NAME)

RN 1093623-56-3 CAPLUS

CN 3-Pyridinecarboxamide, 5-(3-fluorophenyl)-N-[2-[6-(4-morpholinylmethyl)thiazolo[5,4-b]pyridin-2-yl]phenyl]- (CA INDEX NAME)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L4 ANSWER 5 OF 37 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2008:1448267 CAPLUS

DOCUMENT NUMBER: 150:5608

TITLE: Preparation of quinoline derivatives as PI3 kinase

inhibitors

INVENTOR(S): Adams, Nicholas D.; Burgess, Joelle Lorraine; Darcy,

Michael Gerard; Donatelli, Carla A.; Knight, Steven

David; Newlander, Kenneth Allen; Ridgers, Lance;

Sarpong, Martha; Schmidt, Stanley J. SmithKline Beecham Corporation, USA

SOURCE: PCT Int. Appl., 163pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT ASSIGNEE(S):

	PA]	CENT 1	NO.			KIN	D	DATE			APPL	ICAT	ION I	NO.			ATE	
	uo Т	2008	1444	 63		A1	_	2008	 1127	1	WO 2	 008-1	JS63	 819				
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			CA,	CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,
			FI,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,
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			TG,	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): CASREACT 150:5608; MARPAT 150:5608

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AΒ The title compds. I [R1 = (un)substituted heterocycloalkyl, (hetero)aryl; R2 = (un) substituted pyridinyl; R3, R4 = H, halo, acyl, etc.; n = 1-2], useful for inhibiting the activity/function of PI3 kinases, were prepared and formulated. That is, a multi-step synthesis of II, starting from 6-bromo-4-chloroquinoline, was given. Exemplified compds. I were tested and found active against PI3K α (IC50's ranged from about 1 nM to 10 μ M). Also invented is a method of treating one or more disease states selected from: autoimmune disorders, inflammatory diseases, cardiovascular diseases, neurodegenerative diseases, allergy, asthma, pancreatitis, multiorgan failure, kidney diseases, platelet aggregation, cancer, sperm motility, transplantation rejection, graft rejection and lung injuries by the administration of quinoline I. ΙT

1086060-63-0P 1086060-70-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of quinoline derivs. as PI3 kinase inhibitors useful in treatment of diseases)

RN 1086060-63-0 CAPLUS

3-Pyridinecarboxamide, N-(2,4-difluorophenyl)-5-[4-(4-pyridinyl)-6-CN quinolinyl] - (CA INDEX NAME)

RN 1086060-70-9 CAPLUS

3-Pyridinecarboxamide, N-methyl-N-phenyl-5-[4-(4-pyridinyl)-6-quinolinyl]-CN (CA INDEX NAME)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 6 OF 37 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2008:1448266 CAPLUS

DOCUMENT NUMBER: 150:5607

TITLE: Preparation of quinoline derivatives as PI3 kinase

inhibitors

INVENTOR(S): Adams, Nicholas D.; Chaudhari, Amita M.; Donatelli,

Carla A.; Knight, Steven David; Newlander, Kenneth Allen; Parrish, Cynthia A.; Ridgers, Lance; Sarpong,

Martha A.

PATENT ASSIGNEE(S): SmithKline Beecham Corporation, USA

SOURCE: PCT Int. Appl., 165pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	ATENT 1	NO.			KIN	D	DATE			APPL	ICAT	ION 1	NO.			ATE	
WC	2008	1444	 64		A1	_	2008	1127	1	WO 2	 008-1	 US63	 821			0080	
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 R^{3}

AB The title compds. I [R1 = (un)substituted heterocycloalkyl, (hetero)aryl; R2 = (un)substituted pyridinyl, pyrazolyl, etc.; R3, R4 = H, halo, acyl, etc.; n = 1-2; with the proviso], useful for inhibiting the activity/function of PI3 kinases, were prepared and formulated. That is, a multi-step synthesis of II, starting from 6-bromo-4-chloroquinoline, was given. Exemplified compds. I were tested and found active against PI3K α (IC50's ranged from about 1 nM to 10 μ M). Also invented is a method of treating one or more disease states selected from: autoimmune disorders, inflammatory diseases, cardiovascular diseases, neurodegenerative diseases, allergy, asthma, pancreatitis, multiorgan failure, kidney diseases, platelet aggregation, cancer, sperm motility, transplantation rejection, graft rejection and lung injuries by the administration of quinoline I.

IT 1086060-63-0P 1086060-70-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

1086060-63-0 CAPLUS

RN

CN

3-Pyridinecarboxamide, N-(2,4-difluorophenyl)-5-[4-(4-pyridinyl)-6-quinolinyl]- (CA INDEX NAME)

RN 1086060-70-9 CAPLUS

CN 3-Pyridinecarboxamide, N-methyl-N-phenyl-5-[4-(4-pyridinyl)-6-quinolinyl]-(CA INDEX NAME)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 37 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2008:1360516 CAPLUS

DOCUMENT NUMBER: 149:533929

TITLE: Preparation of sulfonamide derivatives as PGE2

production inhibitors

INVENTOR(S): Yokotani, Junichi; Taniguchi, Yoichi; Konishi,

Yoshitake; Tada, Yukie; Yanai, Minori; Katai, Masaki

PATENT ASSIGNEE(S): Toyama Chemical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 214pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA:	TENT :	NO.			KIN	D	DATE			APPL	ICAT	ION :	NO.			ATE	
WO	2008	 1363	 78		A1	_	2008	1113		WO 2	008-	 JP58	 015			080	
	W:	ΑE,	AG,	AL,	AM,	AO,	AT,	ΑU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,
		CA,	CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,
		FΙ,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,
		KG,	KM,	KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,
		ME,	MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,
		PL,	PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ΤJ,	TM,
		TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW		•	·
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HR,	HU,
		ΙE,	IS,	IT,	LT,	LU,	LV,	MC,	MT,	NL,	NO,	PL,	PT,	RO,	SE,	SI,	SK,
		TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,
		TG,	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,
	TG, BW, G: AM, AZ, B					KΖ,	MD,	RU,	ΤJ,	TM							
PRIORIT	Y APP	LN.	INFO	.:						JP 2	007-	1180	61	i	A 20	0070	427
OTHER SO	OURCE		MAR:	PAT	149:	5339	29										
GI																	

AB The title compds. I [R1 = H, (un)substituted alkyl, alkenyl, etc.; R2 = (un)substituted alkyl, alkenyl, alkynyl, etc.; R3 = (un)substituted cycloalkyl, cycloalkenyl, aryl, etc.; R4 = (un)substituted cycloalkyl, cycloalkenyl, aryl, etc.; R5 = H, halo, cyano, etc.; X1 = (un)substituted alkylene, alkenylene, alkynylene, etc.; X2 = O, S, (protected) imino, etc.; Y1 = (protected) imino, (un)substituted alkylene, alkenylene, etc.; Z1 = N, CR6; R6 = H, halo, cyano, etc.; Z2 = N, CR7; R7 = H, halo, cyano, etc.; a proviso related to Z2 is given] are prepared Thus, N-(2-(methyl(methylsulfonyl)amino)-5-phenylphenyl)benzamide was prepared in a multistep process starting from 4-bromo-N-methyl-2-nitroaniline and phenylboronic acid. In an assay using cells, compds. of this invention at 0.1 μ mol/L gave 62% to 96% inhibition against the production of prostaglandin E2.

IT 1078135-56-4P

RN

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of sulfonamide derivs. as PGE2 production inhibitors) 1078135-56-4 CAPLUS

CN 3-Pyridinecarboxamide, N-[4-[methyl(methylsulfonyl)amino][1,1'-biphenyl]-3-yl]-5-phenyl- (CA INDEX NAME)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 37 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2008:1339223 CAPLUS

DOCUMENT NUMBER: 149:534228

TITLE: Preparation of aminodihydrothiazine derivatives as

BACE1 inhibitors

INVENTOR(S): Tamura, Yuusuke; Suzuki, Shinji; Tada, Yukio;

Yonezawa, Shuji; Fujikoshi, Chiaki; Matsumoto, Sae;

Kooriyama, Yuuji; Ueno, Tatsuhiko

PATENT ASSIGNEE(S): Shionogi & Co., Ltd., Japan

SOURCE: PCT Int. Appl., 255pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PAT	CENT	NO.			KIN	D	DATE			APPL	ICAT	ION I	NO.		D.	ATE	
	WO	2008	 1332	 74		A1	_	2008	1106		 WO 2	008-	 JP57	 847		2	0080	423
		W:	ΑE,	AG,	AL,	AM,	ΑO,	ΑT,	ΑU,	ΑZ,	ΒA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,
			CA,	CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,
			FI,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,
			KG,	KM,	KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,
	ME, MG, M PL. PT. R				MK,	MN,	MW,	MX,	MY,	MΖ,	NA,	NG,	NΙ,	NO,	NZ,	OM,	PG,	PH,
	PL, PT, R				RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ТJ,	TM,
	TN, TR, T				TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW			
		RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HR,	HU,
			IE,	IS,	IT,	LT,	LU,	LV,	MC,	MT,	NL,	NO,	PL,	PT,	RO,	SE,	SI,	SK,
			TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,
			TG,	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,
			AM,	ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ΤJ,	TM							
	ΑU	2008	2450	82		A1		2008	1106		AU 2	-800	2450	82		2	0800	423
	AU 2008245082 CA 2683887							2008	1106		CA 2	-800	2683	887		2	0800	423
PRIO	RIORITY APPLN. INFO.:										JP 2	007-	1142	88		A 2	0070	424
											JP 2	007-	2905	89		A 2	0071	108
											WO 2	008-	JP57	847	1	W 2	0800	423
0.000	- ~		(0)					1 10		~ ~								

OTHER SOURCE(S): MARPAT 149:534228

 R^4

 R^5

GI

$$R6$$
 $R1$
 $R1$
 Me
 O
 O
 H
 N
 Me
 NH_2
 O
 F
 Me
 Me

NR20R21

AB The title compds. I [ring A is an optionally substituted carbocyclic group or an optionally substituted heterocyclic group; R1 is optionally substituted lower alkyl, optionally substituted lower alkenyl, or

RN

optionally substituted lower alkynyl, etc.; R20 and R21 are each independently hydrogen, optionally substituted lower alkyl, or optionally substituted acyl; and R3, R4, R5, and R6 are each independently hydrogen, halogeno, hydroxy, optionally substituted lower alkyl, etc.] are prepared The title compound II was prepared in a multistep process starting from 2'-fluoroacetophenone. Compds. of this invention showed IC50 values of $0.02 \mu M$ to $9.25 \mu M$ against β -secretase. Pharmaceutical formulations are given.

1075225-24-9P ΤТ

> RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

> (preparation of aminodihydrothiazine derivs. as BACE1 inhibitors) 1075225-24-9 CAPLUS

3-Pyridinecarboxamide, N-[3-(2-amino-5,6-dihydro-4-methyl-4H-1,3-thiazin-4-CN yl)-4-fluorophenyl]-5-phenyl- (CA INDEX NAME)

THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD OS.CITING REF COUNT: 2

(2 CITINGS)

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 8

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 9 OF 37 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2008:1043511 CAPLUS

DOCUMENT NUMBER: 149:307537

TITLE: Preparation of anyl and heteroaryl amides bearing a

trihydroxyphenyl moiety as E-, P- or L-selectin ligands for treatment, diagnosis or prophylaxis of

acute or chronic inflammatory disorders

INVENTOR(S): Aydt, Ewald M.; Kranich, Remo

PATENT ASSIGNEE(S): Revotar Biopharmaceuticals A.-G., Germany

SOURCE: U.S. Pat. Appl. Publ., 27pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	ENT	NO.			KIN	D	DATE			APPL	ICAT	ION 1	NO.		D.	ATE	
						_									_		
US	2008	0207	741		A1		2008	0828		US 2	008-	6705	9		2	0080	501
WO	2007	0391	12		A1		2007	0412		WO 2	006-	EP91	53		2	0060	920
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
		GE,	GH,	GM,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KM,	KN,	KP,
		KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,
		MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	RS,
		RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,

UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, MI, MR, NE, SN, TD, TG, RW, GH

CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,

KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: EP 2005-30509 A 20050920

WO 2006-EP9153 W 20060920 EP 2005-205095 A 20050920

OTHER SOURCE(S): MARPAT 149:307537

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. e.g., I [X = (CH2)n(NH)mCO, (hetero)arylaminocarbonyl, etc.; m = 0, 1; n = 1-3; Y = substituted phenyl(amino), pyridyl(amino), pyrimidinyl(amino), piperazinyl, etc.], were prepared Thus, a solution of 2-(2,4,6-trimethoxyphenyl)acetic acid in CH2Cl2 was coupled with Me 3-aminobenzoate in the presence of EDC hydrochloride, Et3N and DMAP overnight at rt followed by workup to give II in 95% yield. The ester II was saponified with LiOH in THF/H2O for 40 h at room temperature (99%) then treated

with BBr3 in CH2Cl2 at -78° to give 22%

3-[2-(2,4,6-trimethoxyphenyl)acetylamino]benzoic acid III. III inhibited binding of E-, P-, and L-selectin in the sialyl Lewis tyrosine sulfate assay with IC50 = 12.4 μ M, 20.7 μ M, and 22.1 μ M, resp.

IT 929112-15-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of (hetero) aryl amides bearing a trihydroxyphenyl moiety as E-, P- or L-selectin ligands for treatment, diagnosis or prophylaxis of acute or chronic inflammatory disorders)

RN 929112-15-2 CAPLUS

CN 2-Thiophenecarboxylic acid, 5-[2-[[[5-(2,4,6-trihydroxyphenyl)-3-pyridinyl]carbonyl]amino]phenyl]- (CA INDEX NAME)

L4 ANSWER 10 OF 37 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2008:223700 CAPLUS

DOCUMENT NUMBER: 148:285056

TITLE: Preparation of N-pyridinyl benzamides derivatives as

cytokine inhibitors

INVENTOR(S): Boman, Erik; Ernst, Justin; Montalban, Antonio

Garrido; Larson, Christopher; Lum, Christopher; Pei, Yazhong; Sebo, Lubomir; Urban, Jan; Wang, Zhijun; Zhu,

...

PATENT ASSIGNEE(S): Kemia, Inc., USA

SOURCE: PCT Int. Appl., 309pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	ENT	NO.			KIN	D	DATE			APPL	ICAT	ION	. O <i>V</i>		D	ATE	
WO	2008	0213	88		A1	_	2008	0221	1	WO 2	007-	JS18	049		2	0070	816
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	CA,
		CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	FΙ,
		GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,
		KM,	KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	ME,
		MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,
		PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ТJ,	TM,	TN,
		TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW				
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,
		IS,	IT,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,
		ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG,	BW,
		GH,	GM,	ΚE,	LS,	MW,	MΖ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,
		BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM									
PRIORITY	APP	LN.	INFO	.:					1	US 2	006-	8387	95P	I	P 2	0060	817
									1	US 2	007-	8914	70P	I	P 2	0070.	223

OTHER SOURCE(S): MARPAT 148:285056

GΙ

AB The title compds. I [X = CH, N or NO; Y = CH, N, NO, provided that X and Y are not both CH or NO; A = halo, alkyl, alkoxy, etc.; G = (un)substituted (hetero)aryl; Ar = 6-membered aryl or heteroaryl; L1 = CONH; L2 = a bond, CONH, CONHCH2, etc.; Q = (un)substituted alkyl, cycloalkyl, aryl, etc.; R

= H or alkyl; n = 0-2; with the provision] were prepared and disclosed as cytokine inhibitors. E.g., a multi-step synthesis of II, starting from 2-methyl-3-bromo-5-nitropyridine, was given. Each of 345 exemplified compds. I listed in a table was tested in the TNF α ELISA assay and was found to have activity therein, with most compds. having IC50s below 10 μ M in this assay. In particular, I are useful as anti-inflammatory agents. Further disclosed are methods for their use in preventing or treating conditions mediated by cytokines, such as for example arthritis, pain, and cancer.

1008137-45-8P 1008137-46-9P 1008137-47-0P 1008137-48-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of N-pyridinyl benzamides as cytokine inhibitors useful in treating and preventing cytokine-mediated diseases)

RN 1008137-45-8 CAPLUS

CN 3-Pyridinecarboxamide, N-[3-cyano-5-(1,1-dimethylethyl)phenyl]-5-[4-[[(2,2-dimethylpropyl)amino]carbonyl]phenyl]-6-methyl- (CA INDEX NAME)

RN 1008137-46-9 CAPLUS

CN 3-Pyridinecarboxamide, N-[3-cyano-5-(1,1-dimethylethyl)-2-methoxyphenyl]-5- [4-[[(2,2-dimethylpropyl)amino]carbonyl]phenyl]-6-methyl- (CA INDEX NAME)

RN 1008137-47-0 CAPLUS

CN 3-Pyridinecarboxamide, N-[3-cyano-5-(1,1-dimethylethyl)-2-methoxyphenyl]-5[4-[[(3-hydroxy-2,2-dimethylpropyl)amino]carbonyl]phenyl]-6-methyl- (CA INDEX NAME)

RN 1008137-48-1 CAPLUS

CN 3-Pyridinecarboxamide, N-[3-cyano-5-(1,1-dimethylethyl)-2-methoxyphenyl]-5[4-[[[(1-hydroxycyclopropyl)methyl]amino]carbonyl]phenyl]-6-methyl- (CA
INDEX NAME)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 11 OF 37 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2007:1454593 CAPLUS

DOCUMENT NUMBER: 148:70192

TITLE: Therapy using cytokine inhibitors

INVENTOR(S): Crowley, Constance A.; Delaet, Nancy G. J.; Ernst, Justin; Grove, Carrie Gail; Hepburn, Bonnie; King, Bernard; Larson, Christopher J.; Miller, Stephen;

Pryor, Kent; Shuster, Lewis J.

PATENT ASSIGNEE(S): Kemia Inc., USA

SOURCE: PCT Int. Appl., 251pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	ENT 1	NO.			KIN	D	DATE			APPL	ICAT	ION I	.OV		D.	ATE	
	2007 2007				A2 A3		2007 2008		1	WO 2	007-1	US70	547		2	0070	606
	W:	CH,	CN,	CO,	CR,	CU,	AU, CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	FI,
		KM,	KN,	KP,	KR,	KZ,	GT, LA, MY,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	ME,
		PT,	RO,	RS,	RU,	SC,	SD, US,	SE,	SG,	SK,	SL,	SM,	SV,				•
	RW:	IS,	IT,	LT,	LU,	LV,	CZ, MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,
		GH,	GM,	KE,	LS,	MW,	GA, MZ, TJ,	NA,	SD,	SL,	SZ,	TZ,					
AU	2007.					•	2007		,				59		2	0070	606
EP	2035	005			A2		2009	0318		EP 2	007-	7981	90		2	0070	606
	R:	IS,	IT,	LI,		LU,	CZ, LV,										
PRIORITY	APP:	•	•	•	1110,	100			1	US 2 US 2	006-1 006-1 006-1	8330 8352	78P 70P]	P 2 P 2	0060 0060 0060 0070	724 803
									_			_				_	

OTHER SOURCE(S): MARPAT 148:70192

AB The invention discloses methods for treating, preventing, modifying and managing cytokine-mediated disorders or related disorders, which comprise the administration of a compound, such as a cytokine inhibitor, alone or in combination with known therapeutics. The invention also relates to pharmaceutical compns. and dosing regimens using the disclosed compds. In particular, the invention relates to the use of compds. as disclosed herein, optionally in conjunction with other therapies, for the treatment of autoimmune diseases, inflammatory diseases, cardiovascular diseases, and cancer.

IT 943639-59-6

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(therapy using cytokine inhibitors)

RN 943639-59-6 CAPLUS

CN 3-Pyridinecarboxamide, N-[3-[5-[[(2,2-dimethylpropyl)amino]carbonyl]-3-isoxazolyl]-4-methylphenyl]-5-phenyl- (CA INDEX NAME)

L4ANSWER 12 OF 37 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2007:729095 CAPLUS

DOCUMENT NUMBER: 147:143408

Arylisoxazolecarboxamides as cytokine inhibitors and TITLE:

their preparation, pharmaceutical compositions and use

in the treatment of cytokine-mediated diseases

Boman, Erik; Montalban, Antonio Garrido; Pei, Yazhong; INVENTOR(S):

Larson, Christopher; Wang, Zhijun; Urban, Jan; Deleat, Nancy G.L.; Sebo, Lubomir; Lum, Christopher; Ernst,

Justin

PATENT ASSIGNEE(S): Kemia, Inc., USA

PCT Int. Appl., 241 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	ENT :	NO.			KIN	D	DATE		-	APPL	ICAT	I NOI	NO.			ATE	
	2007				A2		2007		,	WO 2	006-	JS48	803			0061	
WO	2007				А3		2008										
	W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
		GE,	GH,	GM,	GΤ,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚM,	KN,
		KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,
		MN,	MW,	MX,	MY,	MΖ,	NA,	NG,	NΙ,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,
		RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ΤJ,	TM,	TN,	TR,	TT,
		TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW						
	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,
							MC,										
		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	GH,
		GM,	KE,	LS,	MW,	MΖ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
		KG,	KΖ,	MD,	RU,	ΤJ,	TM,	AP,	EA,	EP,	OA						
PRIORITY	APP	LN.	INFO	.:		·	·		•	US 2	005-	7536	34P		P 2	0051	222
	US 2006-787362E										62P		P 2	0060	330		
										US 2	006-	8420.	51P		P 2	0060	901

OTHER SOURCE(S): MARPAT 147:143408

GΙ

The invention provides low mol. weight compds. of formula I useful as AB cytokine inhibitors, and compns. thereof. Compds. of formula I wherein ${\tt X}$ and Y are independently CH and N; A is F, Cl, Br, I, NH2 and derivs., C1-3 (halo)alkyl and O-C1-3 (halo)alkyl; B, D, and E are independently N, NH and derivs., O, S, CH and (un) substituted C-alkyl; G is (un) substituted (hetero)aryl; L1 is CONH; L2 is (un)substituted (alkyl)amino(alkyl), (un) substituted alkyl-acyl, acyl, etc.; Q is H, (un) substituted alkyl, cycloalkyl, aryl and heterocyclyl; dotted lines are single and double bonds; and their stereoisomers, tautomers, solvates, prodrugs and pharmaceutically acceptable salts thereof, are claimed. In particular, compds. of the invention are useful as anti-inflammatory, anti-pain or anti-cancer agents. There are further provided methods for the preparation of such agents and their use in preventing or treating conditions mediated by cytokines. Example compound II was prepared by condensation of 2-methyl-5-nitrobenzaldehyde with hydroxylamine hydrochloride; the resulting 2-methyl-5-nitrobenzaldehyde oxime underwent cyclization with tert-Bu propiolate to give tert-Bu 3-(2-methyl-5-nitrophenyl)isoxazole-5-carboxylate, which underwent hydrolysis to give the corresponding isoxazole-5-carboxylic acid, which underwent amidation with 2-(aminomethyl)pyridine to give 3-(2-methyl-5-nitrophenyl)-N-(pyridin-3-yl)methylisoxazole-5-carboxamide,

II

3-(2-methyl-5-nitrophenyl)-N-(pyridin-3-yl)methylisoxazole-5-carboxamide, which underwent reduction to give 3-(5-amino-2-methylphenyl)-N-(pyridin-3-yl)methylisoxazole-5-carboxamide, which underwent amidation with 5-tert-butyl-2-methoxybenzoic acid to give compound II. All the invention compds. were evaluated for their cytokine inhibitory activity. 943639-59-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of arylisoxazolecarboxamides as cytokine inhibitors useful in treatment and prevention of cytokine-mediated diseases)

RN 943639-59-6 CAPLUS

ΙT

CN 3-Pyridinecarboxamide, N-[3-[5-[[(2,2-dimethylpropyl)amino]carbonyl]-3-isoxazolyl]-4-methylphenyl]-5-phenyl- (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Me} & \text{O} \\ & \text{N} & \text{NH-C} \\ & \text{NH-C} \\ & \text{NH-C} \\ & \text{Ph} \\ & \text{O} \\ \end{array}$$

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

ANSWER 13 OF 37 CAPLUS COPYRIGHT 2010 ACS on STN

2007:619333 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 147:72639

TITLE: Pyridine derivatives, processes for preparing them,

pharmaceutical compositions containing them, and their

use as selective kinase inhibitors

Kling, Marcel Robert; Burns, Chris John INVENTOR(S): PATENT ASSIGNEE(S): Cytopia Research Pty. Ltd., Australia

PCT Int. Appl., 72pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	TENT :	NO.			KIN	D	DATE			APPL	ICAT	ION 1	O.		Dž	ATE	
WO	2007	0624	 59		A1	_	2007	0607	•	WO 2	 006-2	AU17:	 99		20	 0061	 129
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		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KM,	KN,
		KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,
		MN,	MW,	MX,	MY,	ΜZ,	NA,	NG,	ΝI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,
		RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ΤJ,	TM,	TN,	TR,	TT,
		TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW						
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,
		IS,	ΙΤ,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG,	BW,	GH,
		GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
		KG,	KΖ,	MD,	RU,	ΤJ,	TM										
PRIORIT	Y APP	LN.	INFO	.:						AU 2	005-	9066	67		A 20	0051	129
OTHER S	OURCE	(S):			MAR:	PAT	147:	72639	9								

OTHER SOURCE(S): MARPAT 147:72639

GΙ

AB The invention relates to pyridine derivs. I, processes for preparing them, pharmaceutical prepns. comprising them, and their pharmaceutical use. I are selective inhibitors of the enzyme Janus kinase 3, useful for the treatment of tyrosine kinase-associated diseases. In compds. I, A is H, CH2=CHC(0)NH-, etc.; B is (un)substituted (hetero)aryl; C is a bond, NH, C(0), etc.; D is a bond, NH, O, S, etc.; E is (un)substituted alkyl, (hetero)aryl, etc.; Y is halo, OH, alkyl, etc.; including pharmaceutically acceptable prodrugs, salts, hydrates, solvates, crystal forms, and isomeric forms thereof. For instance, the invention compound II was prepared by substitution of 5-bromonicotinoyl chloride with 2,6-dimethylaniline followed by cross-coupling with 3-aminophenylboronic acid and condensation with acrylic acid. Representative examples of I exhibited a capacity to inhibit 50% of JAK activity at a concentration of 20 $\mu \rm M$.

ΙI

IT 1044945-81-4 1044945-82-5

RL: PRPH (Prophetic)

(Pyridine derivatives, processes for preparing them, pharmaceutical compositions containing them, and their use as selective kinase inhibitors)

RN 1044945-81-4 CAPLUS

CN 3-Pyridinecarboxamide, 5-(4-aminophenyl)-N-(2,6-dimethylphenyl)- (CA INDEX NAME)

RN

CN INDEX NAME NOT YET ASSIGNED

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; selective kinase-inhibiting compds. useful in treatment of tyrosine kinase - associated diseases)

RN 940866-07-9 CAPLUS

CN 3-Pyridinecarboxamide, N-(2,6-dimethylphenyl)-5-[3-[$(1-\infty -2-propen-1-yl)$ amino]phenyl]- (CA INDEX NAME)

RN 940866-08-0 CAPLUS

CN 3-Pyridinecarboxamide, N-(2,6-dimethylphenyl)-5-[3-[[(1-oxo-2-propen-1-yl)amino]methyl]phenyl]- (CA INDEX NAME)

RN 940866-09-1 CAPLUS

CN 3-Pyridinecarboxamide, N-(2,6-dimethylphenyl)-5-[4-[(1-oxo-2-propen-1-yl)amino]phenyl]- (CA INDEX NAME)

RN 940866-10-4 CAPLUS

CN 3-Pyridinecarboxamide, N-(2,6-dimethylphenyl)-5-[4-[[(1-oxo-2-propen-1-yl)amino]methyl]phenyl]- (CA INDEX NAME)

RN 940866-11-5 CAPLUS

CN 3-Pyridinecarboxamide, N-(2,6-dimethylphenyl)-5-[3-[(ethenylsulfonyl)amino]phenyl]- (CA INDEX NAME)

RN 940866-12-6 CAPLUS

CN 3-Pyridinecarboxamide, N-(2,6-dimethylphenyl)-5-[4-[(1-oxo-2-buten-1-yl)amino]phenyl]- (CA INDEX NAME)

RN 940866-13-7 CAPLUS

CN 3-Pyridinecarboxamide, N-(2,6-dimethylphenyl)-5-[4- [(ethenylsulfonyl)amino]methyl]phenyl]- (CA INDEX NAME)

RN 940866-14-8 CAPLUS

CN 3-Pyridinecarboxamide, N-(2,6-dimethylphenyl)-5-[4-

[(ethenylsulfonyl)amino]phenyl]- (CA INDEX NAME)

RN 940866-15-9 CAPLUS

CN 3-Pyridinecarboxamide, N-(2,6-dimethylphenyl)-5-[4-[(1-oxo-3-phenyl-2-propen-1-yl)amino]phenyl]- (CA INDEX NAME)

RN 940866-16-0 CAPLUS

CN 3-Pyridinecarboxamide, N-(2,6-dimethylphenyl)-5-[3-[(1-oxo-3-phenyl-2-propen-1-yl)amino]phenyl]- (CA INDEX NAME)

RN 940866-17-1 CAPLUS

CN 3-Pyridinecarboxamide, N-(2,6-dimethylphenyl)-5-[3-[(1-oxo-2-buten-1-yl)amino]phenyl]- (CA INDEX NAME)

RN 940866-18-2 CAPLUS

CN 3-Pyridinecarboxamide, N-(2,6-dimethylphenyl)-5-[4-[(1-oxo-2-butyn-1-yl)amino]phenyl]- (CA INDEX NAME)

RN 940866-19-3 CAPLUS

CN 3-Pyridinecarboxamide, N-(2,6-dimethylphenyl)-5-[3-[(1-oxo-2-butyn-1-yl)amino]phenyl]- (CA INDEX NAME)

RN 940866-20-6 CAPLUS

CN 3-Pyridinecarboxamide, N-(2,6-dimethylphenyl)-5-[4-[[(1-oxo-2-butyn-1-dimethylphenyl)]]

yl)amino]methyl]phenyl]- (CA INDEX NAME)

RN 940866-21-7 CAPLUS

CN 3-Pyridinecarboxamide, N-(2,6-dimethylphenyl)-5-[3-[[(1-oxo-2-butyn-1-yl)amino]methyl]phenyl]- (CA INDEX NAME)

Me NH-C NH-CH₂

$$Me - C = C - C - NH - CH2$$

RN 940866-22-8 CAPLUS

CN 3-Pyridinecarboxamide, N-(2,6-dimethylphenyl)-5-[3-[[(1-oxo-2-buten-1-yl)amino]methyl]phenyl]- (CA INDEX NAME)

RN 940866-23-9 CAPLUS

CN 3-Pyridinecarboxamide, N-(2,6-dimethylphenyl)-5-[3- [(ethenylsulfonyl)amino]methyl]phenyl]- (CA INDEX NAME)

ΙT 940866-24-0P, 5-(3-Aminophenyl)-N-(2,6dimethylphenyl)nicotinamide 940866-25-1P, 5-[3-(Aminomethyl)phenyl]-N-(2,6-dimethylphenyl)nicotinamide 940866-26-2P 940866-27-3P, 5-[4-(Aminomethyl)phenyl]-N-(2,6-dimethylphenyl)nicotinamide RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (intermediate; selective kinase-inhibiting compds. useful in treatment of tyrosine kinase - associated diseases) 940866-24-0 CAPLUS RN 3-Pyridinecarboxamide, 5-(3-aminophenyl)-N-(2,6-dimethylphenyl)- (CA CN INDEX NAME)

RN 940866-25-1 CAPLUS
CN 3-Pyridinecarboxamide, 5-[3-(aminomethyl)phenyl]-N-(2,6-dimethylphenyl)(CA INDEX NAME)

RN 940866-26-2 CAPLUS

CN Carbamic acid, N-[[4-[5-[[(2,6-dimethylphenyl)amino]carbonyl]-3-pyridinyl]phenyl]methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 940866-27-3 CAPLUS

CN 3-Pyridinecarboxamide, 5-[4-(aminomethyl)phenyl]-N-(2,6-dimethylphenyl)-(CA INDEX NAME)

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD

(2 CITINGS)

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 14 OF 37 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2007:526098 CAPLUS

DOCUMENT NUMBER: 147:45202

TITLE: Preparation of novel anthranilic acids as

antibacterial agents: Extensive evaluation of

structural and physical properties on antibacterial

activity and human serum albumin affinity

AUTHOR(S): Thorarensen, Atli; Li, Jianke; Wakefield, Brian D.;

Romero, Donna L.; Marotti, Keith R.; Sweeney, Michael

T.; Zurenko, Gary E.; Sarver, Ronald W.

CORPORATE SOURCE: Medicinal Chemistry and Infectious Diseases Biology,

Pharmacia Corporation, Kalamazoo, MI, 49001, USA

SOURCE: Bioorganic & Medicinal Chemistry Letters (2007),

17(11), 3113-3116

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 147:45202

GΙ

Ι

AB In the past few years a significant effort has been devoted by Pharmacia toward the discovery of novel antibiotics. We describe the preparation of several selected analogs such as I to probe the dependency of this template for antibacterial activity and the affinity these compds. have for human serum albumin (HSA). These analogs illustrate that decreased affinity for HSA can be achieved while retaining relevant antibacterial activity. The most important factor for reduced HSA affinity is decrease in log P rather than a structural change.

IT 668976-15-6P

RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(antibacterial activity and human serum albumin affinity of anthranilic acids)

RN 668976-15-6 CAPLUS

CN Benzoic acid, 5-cyano-2-[[[5-[4-(1,1-dimethylethyl)phenyl]-3-pyridinyl]carbonyl]amino]- (CA INDEX NAME)

IT 939791-54-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(antibacterial activity and human serum albumin affinity of anthranilic

acids)

RN 939791-54-5 CAPLUS

CN Benzoic acid, 5-cyano-2-[[[5-[4-(1,1-dimethylethyl)phenyl]-3-pyridinyl]carbonyl]amino]-, 1,1-dimethylethyl ester (CA INDEX NAME)

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD

(4 CITINGS)

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 15 OF 37 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2007:322889 CAPLUS

DOCUMENT NUMBER: 146:344355

TITLE: Novel phloroglucinol derivatives having selectin

ligand activity

INVENTOR(S): Kranich, Remo; Aydt, Ewald M.

PATENT ASSIGNEE(S): Revotar Biopharmaceuticals AG, Germany

SOURCE: Eur. Pat. Appl., 36pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PA	TENT	NO.			KIN	D	DATE			APP1	LICAT	ION 1	NO.		_	ATE	
EP	1764	096			A1	_	2007	0321		 EP 2	2005-	2050!	 9			0050	
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		IS,	IT,	LI,	LT,	LU,	LV,	MC,	NL,	PL,	, PT,	RO,	SE,	SI,	SK,	TR,	AL,
		BA,	HR,	MK,	YU												
AU	2006	2991	82		A1		2007	0412		AU 2	2006-	2991	82		2	0060	920
CA	2622	467			A1		2007	0412		CA 2	2006-	2622	467		2	0060	920
EP	1937	237			A1		2008	0702		EP 2	2006-	7921	84		2	0060	920
	R:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	, ES,	FΙ,	FR,	GB,	GR,	HU,	IE,
		IS,	IT,	LI,	LT,	LU,	LV,	MC,	NL,	PL,	, PT,	RO,	SE,	SI,	SK,	TR	
MX	2008	0037	00		A		2008	0616		MX 2	2008-	3700			2	0080	314
IN	2008	CN01	360		Α		2008	1128		IN 2	2008-	CN13	60		2	0080	319
CN	1013	1271	9		Α		2008	1126		CN 2	2006-	8004	3183		2	0080	519
PRIORIT	Y APP	LN.	INFO	.:						EP 2	2005-	2050	9		A 2	0050	920
										WO 2	2006-	EP91.	53	,	₩ 2	0060	920
OTHER C	OLIBOR	(2) .			CZC		т 1/	6.3/	1355	• M7	TAGGA	1/16	· 3/1/1	355			

OTHER SOURCE(S): CASREACT 146:344355; MARPAT 146:344355

AB Pharmaceutical compns. comprising at least one compound containing a 2,4,6-trihydroxyphenyl subunit, pharmaceutically acceptable salts, esters,

or amides and prodrugs thereof, useful in medicine are described. The compds. are applied to modulate the in vitro and in vivo binding processes mediated by E-, P- or L-selectin for the treatment, diagnosis or prophylaxis of inflammatory disorders and other conditions where selectin-mediated processes play a role. Thus, 3-[2-(2,4,6-trihydroxyphenyl)] acetylamino]benzoic acid was prepared (yield

22%) and assayed for its ability to inhibit the binding of P-, L-, or E-selectin chimeric mols. to sLex and tyrosine sulfate residues linked to a polymeric matrix as a PSGL-1 substitute. The IC50-values for P-, L-, and E-selectin binding were 41.2 μ M, 37.1 μ M, and 35.1 μ M, resp.

IT 929112-15-2P

CN

RL: DGN (Diagnostic use); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(phloroglucinol derivs. having selectin ligand activity for treatment, diagnosis or prophylaxis of inflammatory disorders)

RN 929112-15-2 CAPLUS

2-Thiophenecarboxylic acid, 5-[2-[[[5-(2,4,6-trihydroxyphenyl)-3-pyridinyl]carbonyl]amino]phenyl]- (CA INDEX NAME)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2007:322859 CAPLUS

DOCUMENT NUMBER: 146:323555

TITLE: Novel nitrocatechol derivatives having selectin ligand

activity

INVENTOR(S): Aydt, Ewald M.; Kranich, Remo

PATENT ASSIGNEE(S): Revotar Biopharmaceuticals AG, Germany

SOURCE: Eur. Pat. Appl., 45pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.					KINI	D :	DATE		APPLICATION NO.						DATE		
EP 1764095				A1	20070321			EP 2005-20508						20050920			
F	R: A	Τ,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,
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	B	Α,	HR,	MK,	ΥU												
AU 2006299184				A1		2007	0412	AU 2006-299184						20060920			
CA 2622935				A1		20070412			CA 2006-2622935						20060920		
WO 2007039114				A1		20070412			WO 2006-EP9155						20060920		

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W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
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             GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP,
             KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN,
             MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS,
             RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
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     EP 1937238
                                20080702
                                            EP 2006-805784
                                                                    20060920
                          Α1
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             IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR
     JP 2009508902
                          Τ
                                20090305
                                            JP 2008-531609
                                                                    20060920
     MX 2008003698
                                20080606
                                            MX 2008-3698
                          Α
                                                                    20080314
     IN 2008CN01354
                                20081128
                                            IN 2008-CN1354
                                                                    20080319
                          Α
     CN 101374508
                          Α
                                20090225
                                            CN 2006-80038782
                                                                    20080417
     US 20090105280
                          Α1
                                20090423
                                            US 2008-67341
                                                                    20080501
PRIORITY APPLN. INFO.:
                                            EP 2005-20508
                                                                    20050920
                                            WO 2006-EP9155
                                                                    20060920
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 146:323555

AB Pharmaceutical compns. comprising at least one nitrocatechol-based compound or the pharmaceutically acceptable salts, esters or amides and prodrugs thereof and a pharmaceutically acceptable carrier, useful in a medicine are described. The compds. are applied to modulate the in vitro and in vivo binding processes mediated by E-, P- or L-selectin for the treatment, diagnosis or prophylaxis of inflammatory disorders and other conditions where selectin-mediated processes play a role. Thus, compds. of the present invention were assayed for their ability to inhibit the binding of P-, L-, or E-selectin chimeric mols. to sLex and tyrosine sulfate residues linked to a polymeric matrix as a PSGL-1 substitute.

IT 929019-69-2P

RL: DGN (Diagnostic use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(nitrocatechol derivs. having selectin ligand activity for treatment, diagnosis or prophylaxis of inflammatory disorders)

RN 929019-69-2 CAPLUS

CN 2-Thiopheneacetic acid, 5-[2-[[[5-(2,3-dihydroxy-5-nitrophenyl)-3-pyridinyl]carbonyl]amino]phenyl]- (CA INDEX NAME)

L4 ANSWER 17 OF 37 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2007:83548 CAPLUS

DOCUMENT NUMBER: 146:184364

TITLE: Preparation of nicotinamides as inhibitors of mitotic

kinesin

INVENTOR(S): Pinkerton, Anthony B.; David, Robert L.

PATENT ASSIGNEE(S): Kalypsys, Inc., USA SOURCE: PCT Int. Appl., 50 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

GΙ

PA	TENT	NO.			KIN	D	DATE			APPL	ICAT	ION 1	NO.		D.	ATE	
WC					A2		2007		,	WO 2	006-	US27	450		2	0060	713
WC	2007	0117	60		А3		2007	0907									
	W:	ΑE,	ΑG,	AL,	ΑM,	ΑT,	ΑU,	ΑZ,	ΒA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KN,	KP,
		KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,
		MW,	MX,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RS,	RU,
		SC,	SD,	SE,	SG,	SK,	SL,	SM,	SY,	ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,
		US,	UZ,	VC,	VN,	ZA,	ZM,	ZW									
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,
		IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	GH,
		GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
		KG,	KΖ,	MD,	RU,	ΤJ,	TM,										
PRIORIT	Y APP	LN.	INFO	.:						US 2	005-	6995.	23P		P 2	0050	715
OTHER S	OURCE	(S):			MAR:	PAT	146:	1843	64								

AB The title compds. I [R1, R2 = H, alkyl, alkoxyalkyl, etc.; or NR1R2 = (un) substituted heterocycloalkyl; R3-R7 = H, carboxy, alkoxycarbonyl, etc.; X = O or S; Q1, Q2 = CR7 and N (with the proviso that only one of Q1 and Q2 = CR7); Q3-Q7 = CR7 and N], useful as inhibitors of KSP for the

Ι

treatment or prevention of cellular proliferative diseases, were prepared E.g., a 2-step synthesis of II, starting from 5-bromonicotinic acid and 1-benzylpiperidin-4-ylamine, was given. Exemplified compds. I were tested in in vitro KSP ATP depletion assay. For example, II showed IC50 of $\leq\!20~\mu\mathrm{M}$ in that assay. Pharmaceutical composition comprising the compound I as well as a method of treatment of a KSP-mediated disease comprising the administration of compound I in combination with another therapeutic agents are disclosed.

IT 1057089-71-0 1057089-78-7 1057089-81-2

1057089-82-3

RL: PRPH (Prophetic)

(Preparation of nicotinamides as inhibitors of mitotic kinesin)

RN 1057089-71-0 CAPLUS

CN 3-Pyridinecarboxamide, N-(2,5-difluorophenyl)-5-[4-(1,1-dimethylethyl)phenyl]- (CA INDEX NAME)

RN 1057089-78-7 CAPLUS

CN

3-Pyridinecarboxamide, N-(2,5-difluorophenyl)-5-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 1057089-81-2 CAPLUS

CN 3-Pyridinecarboxamide, N-(2,5-difluorophenyl)-5-[3-(1,1-dimethylethyl)phenyl]- (CA INDEX NAME)

RN 1057089-82-3 CAPLUS

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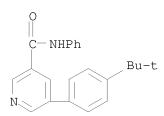
IT 921612-32-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of nicotinamides as inhibitors of mitotic kinesin useful in treatment and prevention of proliferative diseases)

RN 921612-32-0 CAPLUS

CN 3-Pyridinecarboxamide, 5-[4-(1,1-dimethylethyl)phenyl]-N-phenyl- (CA INDEX NAME)



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L4 ANSWER 18 OF 37 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2006:982164 CAPLUS

DOCUMENT NUMBER: 145:356811

TITLE: Preparation of fused heterocyclic kinase inhibitors

INVENTOR(S): Borzilleri, Robert M.; Chen, Zhong; Huynh, Tram N.; Vaccaro, Wayne; Chen, Xiao-Tao; Kim, Kyoung S.; Cai,

Zhen-Wei

PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA

SOURCE: U.S. Pat. Appl. Publ., 141 pp., Cont.-in-part of U.S.

Ser. No. 167,043. CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 145:356811

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AΒ The title compds. I and II [R1 = H, alkyl, cycloalkyl, etc.; R2 = H, halo, CN, etc.; B = 0, NR8, S, S0, S02, CR9C10; V = NR11 or (CR47R48)p; W or X = CR47R48C or N; Y = O, S, NR12; Z = CR13R14, (CR13R14)mNR15; m = 0-2; n = 0-4; p = 00-4, provided that if p = 0, R1 is not Ph; A =substituted pyrrolo[2,1-f][1,2,4]triazin-4-yl, pyrrolo[1,2-b]pyridazin-4-yl, pyrrolo[2,3-b]pyridin-4-yl, etc.; R3, R8, R11, R15 = H, alkyl, cycloalkyl, etc.; R4 = (un)substituted aryl, heteroaryl, heterocycloalkyl; R9, R10 = H, halo, alkyl, etc.; R12 = H, alkyl, CN, etc.; R13-R15, R47, R48 = H, halo, alkyl, etc.; and their pharmaceutically acceptable salts], useful as protein kinase inhibitors for treating cancer and other protein kinase mediated diseases, were prepared E.g., a multi-step synthesis of III, starting from Et 5-methyl-4-oxo-3,4-dihydropyrrolo[2,1-f][1,2,4]triazine-6carboxylate, was given. Compds. I and II inhibit the Met kinase with IC50 values between 0.01 to $100 \mu M$. Pharmaceutical compns. comprising the compound I or II alone or in combination with other antitumor agent are disclosed.

IT 888719-13-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of pyrrolopyridines and pyrrolotriazines as kinase inhibitors for treating cancer) $\,$

RN 888719-13-9 CAPLUS

CN 3-Pyridinecarboxamide, N-[3-fluoro-4-(1H-pyrrolo[2,3-b]pyridin-4-yloxy)phenyl]-1,2-dihydro-2-oxo-5-phenyl-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 888719-12-8 CMF C25 H17 F N4 O3

CM 2

CRN 76-05-1 CMF C2 H F3 O2

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L4 ANSWER 19 OF 37 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2006:608560 CAPLUS

DOCUMENT NUMBER: 145:83228

TITLE: Preparation of pyrid-2-ones useful as inhibitors of

Tec family protein kinases for the treatment of

inflammatory, proliferative and immunologically-mediated diseases

INVENTOR(S): Charrier, Jean-Damien; Durrant, Steven; Ramaya, Sharn;

Jimenez, Juan-Miguel; Rutherford, Alistair Vertex Pharmaceuticals Incorporated, USA

PATENT ASSIGNEE(S): Vertex Pharmaceuticals : SOURCE: PCT Int. Appl., 130 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006065946	A1	20060622	WO 2005-US45336	20051215

OTHER SOURCE(S):

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PRIORITY APPLN. INFO.:
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
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 R^{4

AB The title compds. I [R3, R4 = H, halo or alkyl optionally substituted with halo, alkyl, OCH3, NO2, NH2, CN, NHCH3, SCH3, or N(CH)2; R2 = 3-8 membered saturated, partially unsatd., or fully unsatd. monocyclic ring having 0-3 heteroatoms independently selected from N, O, or S, or 8-12 membered saturated, partially unsatd., or fully unsatd. bicyclic ring system having 0-5 heteroatoms independently selected from N, O, or S; X1, X2 = C(O), NR, or SO2 (wherein one of X1 or X2 = NR and other of X1 or X2 = C(O) or SO2); R1 = TQ (T = a bond or alkylene wherein up tp 3 methylene units are optionally replaced by O, S, CS, etc.; Q = H, alkyl, 3-8 membered saturated,

CASREACT 145:83228; MARPAT 145:83228

partially unsatd., or fully unsatd. monocyclic ring having 0-3 heteroatoms independently selected from N, O, or S, or 8-12 membered saturated, partially unsatd., or fully unsatd. bicyclic ring system having 0-5 heteroatoms independently selected from N, O, or S)] which are effective as inhibitors of Tec family (e.g., Tec, Btk, Itk/Emt/Tsk, Bmx, Txk/Rlk) protein kinases, were prepared Thus, reacting amrinone with 4-tert-butylbenzoyl chloride afforded 9% II which showed Ki between 0.1 μM and 1 μM against ITK. The compds. I and their pharmaceutically acceptable compns. are useful for treating or preventing a variety of diseases, disorders or conditions, including, but not limited to, an autoimmune, inflammatory, proliferative, or hyperproliferative disease or an immunol.-mediated disease.

IT 893439-37-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of pyridones as inhibitors of Tec family protein kinases useful for treating and preventing inflammatory, proliferative, hyperproliferative, autoimmune or immunol.-mediated disease)

RN 893439-37-7 CAPLUS

CN 3-Pyridinecarboxamide, 1,2-dihydro-2-oxo-N,5-diphenyl- (CA INDEX NAME)

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD

(5 CITINGS)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 20 OF 37 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2006:534761 CAPLUS

DOCUMENT NUMBER: 145:28024

TITLE: Preparation of fused heterocyclic kinase inhibitors INVENTOR(S): Borzilleri, Robert M.; Chen, Zhong; Huynh, Tram N.;

Vaccaro, Wayne; Chen, Xiao-Tao; Kim, Kyoung S.; Cai,

Zhen-Wei

PATENT ASSIGNEE(S): Bristol-Myers Squibb Co., USA SOURCE: U.S. Pat. Appl. Publ., 141 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20050288290	A1	20051229	US 2005-167043	20050624
AU 2005259894	A1	20060112	AU 2005-259894	20050628
AU 2005259894	B2	20090319		
AU 2005260056	A1	20060112	AU 2005-260056	20050628
AU 2005260056	B2	20090827		
CA 2571680	A1	20060112	CA 2005-2571680	20050628

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BR 2005012722	А	20080401	BR	2005-12722		20050628
US 20060211695	A1	20060921	US	2005-292358		20051201
US 7439246	В2	20081021				
IN 2006DN07597	A	20070803	IN	2006-DN7597		20061215
IN 2006DN07602	A	20070803	IN	2006-DN7602		20061215
MX 2006015032	A	20070208	ΜX	2006-15032		20061219
MX 2006015192	A	20070228	ΜX	2006-15192		20061220
IN 2006DN07759	A	20070817	IN	2006-DN7759		20061220
ZA 2006010780	A	20081126	ZA	2006-10780		20061220
KR 2007028458	A	20070312	KR	2006-727376		20061227
KR 2007037448	A	20070404	KR	2006-727370		20061227
NO 2007000453	A	20070124	ИО	2007-453		20070124
NO 2007000506	Α	20070214	ИО	2007-506		20070126
NO 2007000514	A	20070312	ИО	2007-514		20070126
PRIORITY APPLN. INFO.:			US	2004-583459P	P	20040628
			US	2004-612563P	P	20040923
			US	2005-167043	A2	20050624
			WO	2005-US22682	W	20050628
			WO	2005-US23099	W	20050628
			WO	2005-US23198	W	20050628

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): CASREACT 145:28024; MARPAT 145:28024

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$$\mathbb{R}^4$$

The title compds. I and II [R1 = H, alkyl, cycloalkyl, etc.; R2 = H, halo, CN, etc.; B = O, NR8, S, SO, SO2, CR9C10; V = NR11 or (CR47R48)p; W or X = C or N; Y = O, S, NR12; Z = CR13R14, (CR13R14)mNR15; m = 0-2; n = 0-4; p = 0-4, provided that if p = 0, R1 is not Ph; A = substituted pyrrolo[2,1-f][1,2,4]triazin-4-yl, pyrrolo[1,2-b]pyridazin-4-yl, pyrrolo[2,3-b]pyridin-4-yl, etc.; R3, R8, R11, R15 = H, alkyl, cycloalkyl, etc.; R4 = (un)substituted aryl, heteroaryl, heterocycloalkyl; R9, R10 = H, halo, alkyl, etc.; R12 = H, alkyl, CN, etc.; R13-R15, R47, R48 = H, halo, alkyl, etc.; and their pharmaceutically acceptable salts], useful as protein kinase inhibitors for treating cancer and other protein kinase mediated diseases, were prepared E.g., a multi-step synthesis of III, starting from Et 5-methyl-4-oxo-3, 4-dihydropyrrolo[2,1-f][1,2,4]triazine-6-

carboxylate, was given. Compds. I and II inhibit the Met kinase with IC50 values between 0.01 to 100 $\mu\text{M}.$ Pharmaceutical compns. comprising the compound I or II alone or in combination with other antitumor agent are disclosed.

IT 888719-13-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

RN 888719-13-9 CAPLUS

CN 3-Pyridinecarboxamide, N-[3-fluoro-4-(1H-pyrrolo[2,3-b]pyridin-4-yloxy)phenyl]-1,2-dihydro-2-oxo-5-phenyl-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 888719-12-8 CMF C25 H17 F N4 O3

CM 2

CRN 76-05-1 CMF C2 H F3 O2

L4 ANSWER 21 OF 37 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2006:534671 CAPLUS

DOCUMENT NUMBER: 145:28023

TITLE: Preparation of pyrrolopyridines and pyrrolotriazines

as kinase inhibitors for treating cancer

INVENTOR(S): Borzilleri, Robert M.; Chen, Zhong; Hunt, John T.;

Huynh, Tram; Poss, Michael A.; Schroeder, Gretchen M.;

Vaccaro, Wayne; Wong, Tai W.; Chen, Xiao-Tao; Kim,

Kyoung S.

PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA SOURCE: U.S. Pat. Appl. Publ., 135 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO.	DATE			
US 20060004006 A1 20060105 US 2005-167049	20050624			
US 7173031 B2 20070206 AU 2005259894 A1 20060112 AU 2005-259894	20050620			
AU 2005259894 A1 20060112 AU 2005-259894 AU 2005259894 B2 20090319	20050628			
AU 2005259094 B2 20090319 AU 2005260056 A1 20060112 AU 2005-260056	20050628			
AU 2005260056 B2 20090827	20030020			
CA 2571680 A1 20060112 CA 2005-2571680	20050628			
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A 20070208

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A 20070312

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US 2004-583459P P 20040628
US 2004-612563P P 20040923
MO 2005-US22682 W 20050628
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PRIORITY APPLN. INFO.:
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 145:28023
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The title compds. I and II [R1 = H, alkyl, cycloalkyl, etc.; R2 = H, halo, AB CN, etc.; B = O, NR8, S, SO, SO2, CR9C10; V = NR11 or (CR47R48)p; W or X = CR47R48C or N; Y = O, S, NR12; Z = CR13R14, (CR13R14)mNR15; m = 0-2; n = 0-4; p = 00-4, provided that if p = 0, R1 is not Ph; A = substitutedpyrrolo[2,1-f][1,2,4]triazin-4-yl, pyrrolo[1,2-b]pyridazin-4-yl,pyrrolo[2,3-b]pyridin-4-yl, etc.; R3, R8, R11, R15 = H, alkyl, cycloalkyl, etc.; R4 = (un)substituted aryl, heteroaryl, heterocycloalkyl; R9, R10 = H, halo, alkyl, etc.; R12 = H, alkyl, CN, etc.; R13-R15, R47, R48 = H, halo, alkyl, etc.; and their pharmaceutically acceptable salts], useful as protein kinase inhibitors for treating cancer and other protein kinase mediated diseases, were prepared E.g., a multi-step synthesis of III, starting from Et 5-methyl-4-oxo-3,4-dihydropyrrolo[2,1-f][1,2,4]triazine-6carboxylate, was given. Compds. I and II inhibit the Met kinase with IC50 values between 0.01 to $100~\mu\mathrm{M}$. Pharmaceutical compns. comprising the compound I or II alone or in combination with other antitumor agent are disclosed.

IT 888719-13-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of pyrrolopyridines and pyrrolotriazines as kinase inhibitors for treating cancer)

RN 888719-13-9 CAPLUS

CN 3-Pyridinecarboxamide, N-[3-fluoro-4-(1H-pyrrolo[2,3-b]pyridin-4-yloxy)phenyl]-1,2-dihydro-2-oxo-5-phenyl-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 888719-12-8 CMF C25 H17 F N4 O3

CM

CRN 76-05-1 CMF C2 H F3 O2

OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD

(7 CITINGS)

REFERENCE COUNT: 205 THERE ARE 205 CITED REFERENCES AVAILABLE FOR

THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

ANSWER 22 OF 37 CAPLUS COPYRIGHT 2010 ACS on STN

2006:333943 CAPLUS ACCESSION NUMBER:

145:62755 DOCUMENT NUMBER:

TITLE: Polymer-Supported Synthesis of Pyridone-Focused

Libraries as Inhibitors of Anaplastic Lymphoma Kinase

Zhu, Tong; Yan, Zheng; Chucholowski, Alexander; Webb, Thomas R.; Li, Rongshi AUTHOR(S):

CORPORATE SOURCE: Department of High Throughput Medicinal Chemistry,

ChemBridge Research Laboratories, San Diego, CA,

92127, USA

SOURCE: Journal of Combinatorial Chemistry (2006), 8(3),

401-409

CODEN: JCCHFF; ISSN: 1520-4766

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 145:62755 AΒ Two series of arylpyridonecarboxamides were prepared by solid-phase synthesis as potential inhibitors of anaplastic lymphoma kinase. 890652-04-7P 890652-06-9P ΙT 890652-05-8P 890652-07-0P 890652-08-1P 890652-12-7P 890652-14-9P 890652-13-8P 890652-15-0P 890652-16-1P 890652-17-2P 890652-18-3P 890652-19-4P 890652-23-0P 890652-29-6P 890652-33-2P RL: SPN (Synthetic preparation); PREP (Preparation) (polymer-supported synthesis of pyridone-focused libraries as inhibitors of anaplastic lymphoma kinase) 890652-04-7 CAPLUS RN CN

methyl-1-piperazinyl)ethoxy]phenyl]-2-oxo- (CA INDEX NAME)

PAGE 1-A

Me

PAGE 2-A

RN 890652-05-8 CAPLUS

CN 3-Pyridinecarboxamide, 5-(1,3-benzodioxol-5-yl)-1,2-dihydro-N-[4-[3-(4-methyl-1-piperazinyl)propoxy]phenyl]-2-oxo- (CA INDEX NAME)

PAGE 2-A

RN 890652-06-9 CAPLUS
CN 3-Pyridinecarboxamide, 5-(1,3-benzodioxol-5-yl)-1,2-dihydro-N-[3-[(4-methyl-1-piperazinyl)methyl]phenyl]-2-oxo- (CA INDEX NAME)

RN 890652-07-0 CAPLUS

CN 3-Pyridinecarboxamide, 5-(1,3-benzodioxol-5-yl)-1,2-dihydro-N-[2-[(4-methyl-1-piperazinyl)methyl]phenyl]-2-oxo- (CA INDEX NAME)

RN 890652-08-1 CAPLUS

CN 3-Pyridinecarboxamide, 5-(1,3-benzodioxol-5-yl)-1,2-dihydro-N-[4-[2-(4-morpholinyl)ethyl]phenyl]-2-oxo- (CA INDEX NAME)

PAGE 1-A

RN 890652-12-7 CAPLUS

CN 3-Pyridinecarboxamide, 5-(1,3-benzodioxol-5-yl)-1,2-dihydro-N-[4-[(4-methyl-1-piperazinyl)carbonyl]phenyl]-2-oxo- (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

RN 890652-13-8 CAPLUS

CN 3-Pyridinecarboxamide, 5-(1,3-benzodioxol-5-yl)-N-[4-[(1,4-dimethyl-2-piperazinyl)methoxy]phenyl]-1,2-dihydro-2-oxo- (CA INDEX NAME)

PAGE 2-A

RN 890652-14-9 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-methyl-,
4-[[5-(1,3-benzodioxol-5-yl)-1,2-dihydro-2-oxo-3pyridinyl]carbonyl]amino]phenyl ester (CA INDEX NAME)

PAGE 2-A

RN 890652-15-0 CAPLUS

CN 3-Pyridinecarboxamide, 5-(1,3-benzodioxol-5-yl)-1,2-dihydro-N-[4-[2-(4-methyl-1-piperazinyl)-2-oxoethyl]phenyl]-2-oxo- (CA INDEX NAME)

PAGE 2-A

RN 890652-16-1 CAPLUS
CN 3-Pyridinecarboxamide, 5-(1,3-benzodioxol-5-yl)-1,2-dihydro-N-[3-[2-(4-methyl-1-piperazinyl)ethoxy]phenyl]-2-oxo- (CA INDEX NAME)

Me
$$N - CH_2 - CH_2 - O$$

NH

O-C

HN

O-C

RN 890652-17-2 CAPLUS

CN 3-Pyridinecarboxamide, 5-(1,3-benzodioxol-5-yl)-1,2-dihydro-N-[4-[2-(1H-imidazol-1-yl)ethyl]phenyl]-2-oxo- (CA INDEX NAME)

RN 890652-18-3 CAPLUS

CN 3-Pyridinecarboxamide, 5-(1,3-benzodioxol-5-yl)-1,2-dihydro-N-[4-(4-morpholinyl)phenyl]-2-oxo- (CA INDEX NAME)

RN 890652-19-4 CAPLUS

CN 3-Pyridinecarboxamide, 5-(1,3-benzodioxol-5-yl)-1,2-dihydro-N-[4-(4-morpholinylmethyl)phenyl]-2-oxo- (CA INDEX NAME)

RN 890652-23-0 CAPLUS

CN 3-Pyridinecarboxamide, 1,2-dihydro-N-[4-[(4-methyl-1-piperazinyl)methyl]phenyl]-2-oxo-5-phenyl- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & \\ N & \\ N$$

RN 890652-29-6 CAPLUS

CN 3-Pyridinecarboxamide, 5-(4-chlorophenyl)-1,2-dihydro-N-[4-[(4-methyl-1-piperazinyl)methyl]phenyl]-2-oxo- (CA INDEX NAME)

RN 890652-33-2 CAPLUS

 $\texttt{CN} \qquad \texttt{3-Pyridinecarboxamide, 5-(4-bromophenyl)-1,2-dihydro-N-[4-[(4-methyl-1-$

piperazinyl)methyl]phenyl]-2-oxo- (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ &$$

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD

(5 CITINGS)

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 23 OF 37 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2006:49622 CAPLUS

DOCUMENT NUMBER: 144:304498

TITLE: Design and Synthesis of 5-Aryl-pyridone-carboxamides

as Inhibitors of Anaplastic Lymphoma Kinase

AUTHOR(S): Li, Rongshi; Xue, Liquan; Zhu, Tong; Jiang, Qin; Cui,

Xiaoli; Yan, Zheng; McGee, Danny; Wang, Jian; Gantla, Vidyasagar Reddy; Pickens, Jason C.; McGrath, Doug; Chucholowski, Alexander; Morris, Stephan W.; Webb,

Thomas R.

CORPORATE SOURCE: ChemBridge Research Laboratories and ChemBridge

Corporation, San Diego, CA, 92127, USA

SOURCE: Journal of Medicinal Chemistry (2006), 49(3),

1006-1015

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 144:304498

AB Anaplastic lymphoma kinase (ALK) is a promising new target for therapy of certain cancers such as anaplastic large-cell lymphoma (ALCL) and inflammatory myofibroblastic tumor (IMT). The authors have identified a series of novel pyridones as kinase inhibitors of ALK by application of a stepwise process involving in vitro screening of a novel targeted library followed by iterative template modification based on medicinal chemical insights and computational ranking of virtual libraries. Using this process, the authors discovered ALK-selective inhibitors with improved potency and selectivity. Herein the details of the design process and synthesis of these novel pyridones, along with their enzymic and cell-based activity, are discussed.

IT 879490-51-4P 879490-52-5P 879490-53-6P 879490-54-7P 879490-56-9P 879490-57-0P

879490-58-1P 879490-60-5P 879490-61-6P

879490-70-7P

RL: CPN (Combinatorial preparation); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); CMBI (Combinatorial study); PREP (Preparation); USES (Uses)

(design and synthesis of 5-aryl-pyridone-carboxamides as inhibitors of

anaplastic lymphoma kinase in relation to antitumor activity)

RN 879490-51-4 CAPLUS

CN 3-Pyridinecarboxamide, 5-(1,3-benzodioxol-5-yl)-1,2-dihydro-N-[4-[2-(4-methyl-1-piperazinyl)ethyl]phenyl]-2-oxo- (CA INDEX NAME)

PAGE 1-A

RN 879490-52-5 CAPLUS

CN 3-Pyridinecarboxamide, 5-(1,3-benzodioxol-5-yl)-1,2-dihydro-N-[4-(4-methyl-1-piperazinyl)phenyl]-2-oxo- (CA INDEX NAME)

RN 879490-53-6 CAPLUS

CN 3-Pyridinecarboxamide, 5-(1,3-benzodioxol-5-yl)-1,2-dihydro-N-[4-[(4-methyl-1-piperazinyl)methyl]phenyl]-2-oxo- (CA INDEX NAME)

PAGE 1-A

RN 879490-54-7 CAPLUS

CN 3-Pyridinecarboxamide, 5-(1,3-benzodioxol-5-yl)-1,2-dihydro-N-[4-[3-(4-methyl-1-piperazinyl)propyl]phenyl]-2-oxo- (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

RN 879490-56-9 CAPLUS

CN 3-Pyridinecarboxamide, 1,2-dihydro-5-(2-methyl-5-benzothiazolyl)-N-[4-[(4-methyl-1-piperazinyl)methyl]phenyl]-2-oxo- (CA INDEX NAME)

PAGE 2-A

RN 879490-57-0 CAPLUS
CN 3-Pyridinecarboxamide, 1,2-dihydro-N-[4-[(4-methyl-1-piperazinyl)methyl]phenyl]-2-oxo-5-(6-quinoxalinyl)- (CA INDEX NAME)

PAGE 2-A

RN 879490-58-1 CAPLUS

CN 3-Pyridinecarboxamide, 1,2-dihydro-N-[4-[(4-methyl-1-piperazinyl)methyl]phenyl]-2-oxo-5-(3,4,5-trimethoxyphenyl)- (CA INDEX NAME)

RN 879490-60-5 CAPLUS

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[(4-methyl-1-piperazinyl)methyl]phenyl]-2-oxo- (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

RN 879490-61-6 CAPLUS

CN 3-Pyridinecarboxamide, 5-(1,3-benzodioxol-5-yl)-1,2-dihydro-N-[2-methyl-4-[(4-methyl-1-piperazinyl)methyl]phenyl]-2-oxo- (CA INDEX NAME)

PAGE 2-A

RN 879490-70-7 CAPLUS

CN 3-Pyridinecarboxamide, 5-(1,3-benzodioxol-5-yl)-1,2-dihydro-N-methyl-N-[4-[(4-methyl-1-piperazinyl)methyl]phenyl]-2-oxo- (CA INDEX NAME)

PAGE 2-A

IT 879490-62-7P 879490-64-9P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
 (Uses)

(design and synthesis of 5-aryl-pyridone-carboxamides as inhibitors of anaplastic lymphoma kinase in relation to antitumor activity)

RN 879490-62-7 CAPLUS

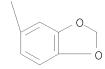
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PAGE 2-A

RN 879490-64-9 CAPLUS

CN 3-Pyridinecarboxamide, 5-(1,3-benzodioxol-5-yl)-2-chloro-N-[4-[(4-methyl-1-piperazinyl)methyl]phenyl]- (CA INDEX NAME)

PAGE 2-A



OS.CITING REF COUNT: 18 THERE ARE 18 CAPLUS RECORDS THAT CITE THIS

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REFERENCE COUNT: 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 24 OF 37 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2004:696342 CAPLUS

DOCUMENT NUMBER: 141:225302

TITLE: Preparation of N-arylheterocycles as melanin

concentrating hormone (MCH) antagonists.

INVENTOR(S): Schwink, Lothar; Stengelin, Siegfried; Gossel,

Matthias; Boehme, Thomas; Hessler, Gerhard; Stahl,

Petra; Gretzke, Dirk

PATENT ASSIGNEE(S): Aventis Pharma Deutschland GmbH, Germany; Aventis

Pharma GmbH

SOURCE: PCT Int. Appl., 390 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 141:225302 GI

Title compds. [I; R1, R2 = H, alkyl, alkoxyalkyl, aryloxyalkyl, alkylcarbonyl, alkenylcarbonyl, etc.; R1R2N = atoms to form a 4-10 membered mono-, bi-, or spirocyclic (substituted) ring; R3 = H, alkyl; R4, R5 = H, alkyl, OH, alkoxy, alkylcarbonyloxy, alkylthio; R6-R9 = H, alkyl; R6R7, R8R9 = O; A, B, D, G = N, CR42; AB, DG = CR42; R42 = H, F, C1, Br, iodo, CF3, NO2, cyano, OCF3, alkoxy, alkylthio, alkenyl, cycloalkyl, cycloalkoxy, cycloalkenyl, alkynyl, CO2H, etc.; R10 = H, alkyl, alkenyl, alkynyl; X = NR52, O, bond, C:C, C.tplbond.C, etc.; R52 = H, alkyl; E = (substituted) C3-14 carbocyclyl, heterocyclyl; K = bond, O, CH2O, S, SO, CO, C:C, C.tplbond.C, etc.; R11 = H, alkyl, alkoxyalkyl, alkenyl, alkynyl, 3-10 membered (substituted) mono-, bi-, tri- or spirocyclic ring; EKR11 =

ΙT

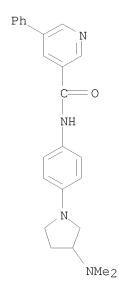
(unsatd.) tricyclic ring; m, n = 0-2], were prepared Thus, N-[1-(4-aminophenyl)pyrrolidin-3-yl]piperidine was treated with carbonyldiimidazole and then with 4-(4-chlorophenyl)piperidine to give 4-(4-chlorophenyl)piperidine-1-carboxylic acid [4-[3-(acetylmethylamino)pyrrolidin-1-yl]phenyl]amide. The latter at 30 mg/kg orally in female NMRI mice reduced milk consumption by 64%. 748175-43-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of N-arylheterocycles as MCH antagonists)

RN 748175-43-1 CAPLUS

CN 3-Pyridinecarboxamide, N-[4-[3-(dimethylamino)-1-pyrrolidinyl]phenyl]-5-phenyl- (CA INDEX NAME)



OS.CITING REF COUNT: 24 THERE ARE 24 CAPLUS RECORDS THAT CITE THIS

RECORD (40 CITINGS)

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 25 OF 37 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2004:534176 CAPLUS

DOCUMENT NUMBER: 141:89017

TITLE: A preparation of nicotinamide-based tyrosine kinase

inhibitors

INVENTOR(S): Burns, Christopher John; Kling, Marcel Robert

PATENT ASSIGNEE(S): Cytopia Pty. Ltd., Australia

SOURCE: PCT Int. Appl., 71 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004054977	A1	20040701	WO 2003-AU1666	20031215
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             NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ,
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PRIORITY APPLN. INFO.:
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                                                                 Ρ
                                                                    20030626
                                             WO 2003-AU1666
                                                                 W
                                                                    20031215
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMATOTHER SOURCE(S): MARPAT 141:89017
GI

AB The invention relates to a preparation of nicotinamide derivs. of formula I [wherein: A is O, S, NH, or N-C1-4alkyl; B is (un)substituted (hetero)aryl; Q is a bond or C1-4alkyl; W is H, (un)substituted C1-4alkyl or C2-6alkenyl; Y is H or (un)substituted (hetero)aryl], useful as kinase inhibitors. Compds. of formula I are useful in the treatment of tyrosine kinase-associated diseases such as carcinoma, cancer, and Alzheimer disease. For instance, pyridineamide derivative II at a concentration of 10 $\mu\rm M$ inhibited

50% or greater of jak2, jak3, and fms enzyme activities.

ΙI

IT 713521-00-7P 713521-04-1P 713521-09-6P 713521-16-5P 713521-18-7P 713521-30-3P 713521-42-7P 713521-73-4P 713521-78-9P

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713523-60-5P
                 713523-61-6P
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RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of nicotinamide-based kinase inhibitors)

RN 713521-00-7 CAPLUS

CN 3-Pyridinecarboxamide, 5-(4-fluorophenyl)-N-[4-(4-methyl-1-piperazinyl)phenyl]- (CA INDEX NAME)

RN 713521-04-1 CAPLUS

CN 3-Pyridinecarboxamide, N-(4-fluoro-2-methylphenyl)-5-(4-fluorophenyl)-(CA INDEX NAME)

RN 713521-09-6 CAPLUS

CN 3-Pyridinecarboxamide, 5-(4-hydroxy-3-methoxyphenyl)-N-(2-methylphenyl)-(CA INDEX NAME)

RN 713521-16-5 CAPLUS

CN 3-Pyridinecarboxamide, N-(2,4-dimethoxyphenyl)-5-(3-methoxyphenyl)- (CA INDEX NAME)

RN 713521-18-7 CAPLUS

CN 3-Pyridinecarboxamide, N-(2,4-dimethoxyphenyl)-5-(3,4,5-trimethoxyphenyl)- (CA INDEX NAME)

RN 713521-30-3 CAPLUS

CN 3-Pyridinecarboxamide, N-(2-methylphenyl)-5-(3,4,5-trimethoxyphenyl)- (CA INDEX NAME)

RN 713521-42-7 CAPLUS

CN 3-Pyridinecarboxamide, 5-(4-hydroxyphenyl)-N-phenyl- (CA INDEX NAME)

RN 713521-73-4 CAPLUS

CN 3-Pyridinecarboxamide, N-(2,5-dimethylphenyl)-5-(4-hydroxyphenyl)- (CA INDEX NAME)

RN 713521-78-9 CAPLUS

CN 3-Pyridinecarboxamide, N-(5-fluoro-2-methylphenyl)-5-(4-hydroxyphenyl)- (CA INDEX NAME)

RN 713521-84-7 CAPLUS

CN 3-Pyridinecarboxamide, N-(2,4-dimethoxyphenyl)-5-(4-hydroxyphenyl)- (CA INDEX NAME)

RN 713521-87-0 CAPLUS

CN 3-Pyridinecarboxamide, 5-(4-hydroxyphenyl)-N-(2-methylphenyl)- (CA INDEX NAME)

RN 713521-98-3 CAPLUS

CN 3-Pyridinecarboxamide, 5-(4-hydroxy-3,5-dimethylphenyl)-N-phenyl- (CA INDEX NAME)

RN 713522-15-7 CAPLUS

CN 3-Pyridinecarboxamide, N-(2,5-dimethylphenyl)-5-(4-hydroxy-3,5-dimethylphenyl)- (CA INDEX NAME)

RN 713522-18-0 CAPLUS

CN 3-Pyridinecarboxamide, N-(5-fluoro-2-methylphenyl)-5-(4-hydroxy-3,5-dimethylphenyl)- (CA INDEX NAME)

RN 713522-21-5 CAPLUS

CN 3-Pyridinecarboxamide, N-(4-fluoro-2-methylphenyl)-5-(4-hydroxy-3,5-dimethylphenyl)- (CA INDEX NAME)

RN 713522-27-1 CAPLUS

CN 3-Pyridinecarboxamide, N-(2,4-dimethoxyphenyl)-5-(4-hydroxy-3,5-dimethylphenyl)- (CA INDEX NAME)

RN 713522-30-6 CAPLUS

CN 3-Pyridinecarboxamide, 5-(4-hydroxy-3,5-dimethylphenyl)-N-(2-methylphenyl)- (CA INDEX NAME)

RN 713522-39-5 CAPLUS

CN 3-Pyridinecarboxamide, 5-(2-chloro-3,4,5-trimethoxyphenyl)-N-phenyl- (CA INDEX NAME)

RN 713522-56-6 CAPLUS

CN 3-Pyridinecarboxamide, 5-(2-chloro-3,4,5-trimethoxyphenyl)-N-[4-(4-morpholinyl)phenyl]- (CA INDEX NAME)

RN 713522-58-8 CAPLUS

CN 3-Pyridinecarboxamide, 5-(2-chloro-3,4,5-trimethoxyphenyl)-N-(2,5-dimethylphenyl)- (CA INDEX NAME)

RN 713522-61-3 CAPLUS

CN 3-Pyridinecarboxamide, 5-(2-chloro-3,4,5-trimethoxyphenyl)-N-(5-fluoro-2-methylphenyl)- (CA INDEX NAME)

RN 713522-64-6 CAPLUS

CN 3-Pyridinecarboxamide, 5-(2-chloro-3,4,5-trimethoxyphenyl)-N-(4-fluoro-2-methylphenyl)- (CA INDEX NAME)

RN 713522-68-0 CAPLUS

CN 3-Pyridinecarboxamide, 5-(2-chloro-3,4,5-trimethoxyphenyl)-N-(2,4-dimethoxyphenyl)- (CA INDEX NAME)

RN 713522-70-4 CAPLUS

CN 3-Pyridinecarboxamide, 5-(2-chloro-3,4,5-trimethoxyphenyl)-N-(2-methylphenyl)- (CA INDEX NAME)

RN 713522-72-6 CAPLUS

CN 3-Pyridinecarboxamide, 5-(2-chloro-3,4,5-trimethoxyphenyl)-N-(3,4,5-trimethoxyphenyl)- (CA INDEX NAME)

RN 713522-86-2 CAPLUS

CN 3-Pyridinecarboxamide, 5-(1,3-benzodioxol-5-yl)-N-phenyl- (CA INDEX NAME)

RN 713522-95-3 CAPLUS

CN 3-Pyridinecarboxamide, 5-(1,3-benzodioxol-5-yl)-N-(2,5-dimethylphenyl)(CA INDEX NAME)

RN 713522-97-5 CAPLUS

CN 3-Pyridinecarboxamide, 5-(1,3-benzodioxol-5-yl)-N-(5-fluoro-2-methylphenyl)- (CA INDEX NAME)

RN 713522-98-6 CAPLUS

CN 3-Pyridinecarboxamide, 5-(1,3-benzodioxol-5-yl)-N-(4-fluoro-2-methylphenyl)- (CA INDEX NAME)

RN 713522-99-7 CAPLUS

CN 3-Pyridinecarboxamide, 5-(1,3-benzodioxol-5-yl)-N-(2,4-dimethoxyphenyl)-(CA INDEX NAME)

RN 713523-00-3 CAPLUS

CN 3-Pyridinecarboxamide, 5-(1,3-benzodioxol-5-yl)-N-(2-methylphenyl)- (CA INDEX NAME)

RN 713523-28-5 CAPLUS

CN 3-Pyridinecarboxamide, 5-(4-fluorophenyl)-N-phenyl- (CA INDEX NAME)

RN 713523-34-3 CAPLUS

CN 3-Pyridinecarboxamide, N-(2,5-dimethylphenyl)-5-(4-fluorophenyl)- (CA

INDEX NAME)

RN 713523-37-6 CAPLUS

CN 3-Pyridinecarboxamide, N-(2,4-dimethoxyphenyl)-5-(4-fluorophenyl)- (CA INDEX NAME)

RN 713523-38-7 CAPLUS

CN 3-Pyridinecarboxamide, 5-(4-fluorophenyl)-N-(2-methylphenyl)- (CA INDEX NAME)

RN 713523-39-8 CAPLUS

CN 3-Pyridinecarboxamide, 5-(4-fluorophenyl)-N-(3,4,5-trimethoxyphenyl)- (CA INDEX NAME)

RN 713523-47-8 CAPLUS

CN 3-Pyridinecarboxamide, 5-(3-methoxyphenyl)-N-phenyl- (CA INDEX NAME)

RN 713523-54-7 CAPLUS

CN 3-Pyridinecarboxamide, N-(2,5-dimethylphenyl)-5-(3-methoxyphenyl)- (CA INDEX NAME)

RN 713523-55-8 CAPLUS

CN 3-Pyridinecarboxamide, N-(5-fluoro-2-methylphenyl)-5-(3-methoxyphenyl)- (CA INDEX NAME)

RN 713523-56-9 CAPLUS

CN 3-Pyridinecarboxamide, N-(4-fluoro-2-methylphenyl)-5-(3-methoxyphenyl)- (CA INDEX NAME)

RN 713523-58-1 CAPLUS

CN 3-Pyridinecarboxamide, 5-(3-methoxyphenyl)-N-(2-methylphenyl)- (CA INDEX NAME)

RN 713523-59-2 CAPLUS

CN 3-Pyridinecarboxamide, N-(2,5-dimethylphenyl)-5-(4-hydroxy-3-methoxyphenyl)- (CA INDEX NAME)

RN 713523-60-5 CAPLUS

CN 3-Pyridinecarboxamide, N-(5-fluoro-2-methylphenyl)-5-(4-hydroxy-3-methoxyphenyl)- (CA INDEX NAME)

RN 713523-61-6 CAPLUS

CN 3-Pyridinecarboxamide, N-(4-fluoro-2-methylphenyl)-5-(4-hydroxy-3-methoxyphenyl)- (CA INDEX NAME)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

(1 CITINGS)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 26 OF 37 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2004:241203 CAPLUS

DOCUMENT NUMBER: 141:53787

TITLE: A novel phase-switching protecting group for

multi-step parallel solution phase synthesis

AUTHOR(S): Li, Xin; Abell, Chris; Congreve, Miles S.; Warrington,

Brian H.; Ladlow, Mark

CORPORATE SOURCE: University Chemical Laboratory, GlaxoSmithKline

Cambridge Technology Centre, Cambridge, CB2 1EW, UK

SOURCE: Organic & Biomolecular Chemistry (2004), 2(7), 989-998

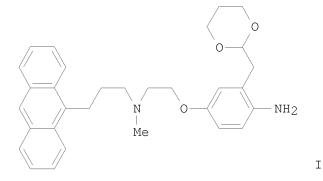
CODEN: OBCRAK; ISSN: 1477-0520

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 141:53787

GΙ



AB A new phase-tag I which facilitates the parallel solution phase synthesis of carboxylic acids, esters, and carboxamides is reported. The new phase tag assists compound purification by enabling the selective resin capture of reaction

products in either a reversible pH dependent manner (solid-phase extraction), or irreversibly in a Diels-Alder reaction.

IT 705961-69-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

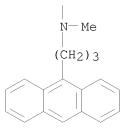
(development of bifunctional tertiary amine phase-tags with demonstrated applications to solution phase synthesis of carboxylic acids, esters and carboxamides)

RN 705961-69-9 CAPLUS

CN 3-Pyridinecarboxamide, N-[4-[2-[[3-(9-anthracenyl)propyl]methylamino]ethoxy]-2-(1,3-dioxan-2-ylmethyl)phenyl]-5-(2-fluorophenyl)- (CA INDEX NAME)

PAGE 1-A

PAGE 2-A



OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD

(6 CITINGS)

REFERENCE COUNT: 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 27 OF 37 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2004:182843 CAPLUS

DOCUMENT NUMBER: 140:235498

TITLE: Preparation of antibacterial benzoic acid derivatives INVENTOR(S): Thorarensen, Atli; Ruble, Craig J.; Fisher, Jed F.;

Romero, Donna L.; Beauchamp, Thomas J.; Northuis, Jill

Μ.

PATENT ASSIGNEE(S): Pharmacia & Upjohn Company, USA

SOURCE: PCT Int. Appl., 500 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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OTHER SOURCE(S): MARPAT 140:235498

AB Title compds. I [X = NH; Y = CO, CS, C(NCN), or X and Y together form an alkene or cycloalkyl; R1 = CO2H; R2 = electron withdrawing group; R4 = (un)substituted heterocycle, provided that the heterocycle is not simultaneously substituted with a sulfonamide and a urea or thiourea] and their pharmaceutically acceptable salts are prepared and disclosed as antibacterial agents. Thus, e.g., II was prepared via conversion of 7-(benzyloxy)-1-methyl-1H-indole-2-carboxylic acid (preparation given) to the acid chloride which is reacted with tert-butyl-2-amino-5-cyanobenzoate then subjected to hydrolysis. For compds. of the invention, the min. inhibitory concentration was determined and found to correspond to a range of 0.0075 -

 $>128~\mu g/mL$. The invention provides antimicrobial agents and methods of using the agents for sterilization, sanitation, antisepsis, disinfection, and treatment of infections in mammals.

IT 668976-09-8P 668976-13-4P 668976-14-5P 668976-15-6P 668976-16-7P 668976-69-0P 668976-70-3P 668976-72-5P 668976-80-5P

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological

RN 668976-13-4 CAPLUS
CN Benzoic acid, 5-cyano-2-[[[5-(2-methylphenyl)-3-pyridinyl]carbonyl]amino](CA INDEX NAME)

RN 668976-14-5 CAPLUS
CN Benzoic acid, 5-cyano-2-[[[5-[2-(trifluoromethyl)phenyl]-3-pyridinyl]carbonyl]amino]- (CA INDEX NAME)

RN 668976-15-6 CAPLUS
CN Benzoic acid, 5-cyano-2-[[[5-[4-(1,1-dimethylethyl)phenyl]-3-pyridinyl]carbonyl]amino]- (CA INDEX NAME)

RN 668976-16-7 CAPLUS
CN Benzoic acid, 2-[[[5-(4-chlorophenyl)-3-pyridinyl]carbonyl]amino]-5-cyano(CA INDEX NAME)

RN 668976-69-0 CAPLUS
CN Benzoic acid, 5-cvano-2-[[[5

CN Benzoic acid, 5-cyano-2-[[[5-[4-(trifluoromethyl)phenyl]-3-pyridinyl]carbonyl]amino]- (CA INDEX NAME)

RN 668976-70-3 CAPLUS

CN Benzoic acid, 5-cyano-2-[[[5-[3-(trifluoromethyl)phenyl]-3-pyridinyl]carbonyl]amino]- (CA INDEX NAME)

RN 668976-72-5 CAPLUS

CN Benzoic acid, 5-cyano-2-[[(5-phenyl-3-pyridinyl)carbonyl]amino]- (CA INDEX NAME)

RN 668976-80-5 CAPLUS

CN Benzoic acid, 5-cyano-2-[[[5-(8-quinolinyl)-3-pyridinyl]carbonyl]amino]- (CA INDEX NAME)

OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD

(8 CITINGS)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 28 OF 37 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2004:20650 CAPLUS

DOCUMENT NUMBER: 140:77035
TITLE: Preparation of

(4-hydroxypiperidin-1-yl)arylcarboxamides as

interleukin-4 production inhibitors for treatment of

allergic diseases

INVENTOR(S): Naito, Youichiro; Ushio, Hiroyuki; Hoshino, Yukio;

Kagoshima, Masahiko; Oshita, Kouichi; Kataoka,

Hirotoshi; Chiba, Kenji

PATENT ASSIGNEE(S): Mitsubishi Pharma Corporation, Japan

GΙ

SOURCE: PCT Int. Appl., 85 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	PATENT NO.						DATE			APPL	ICAT	ION 1	NO.		D	ATE	
WO	2004	0029	 48		A1	_	2004	0108		WO 2	002-	 JP66	 06		2	0020	628
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	ΚE,	KG,	KR,	KΖ,	LC,	LK,	LR,	LS,	LT,
		LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,	PL,	PT,
		RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,
		US,	UZ,	VN,	YU,	ZA,	ZM,	ZW									
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	AZ,	BY,
		KG,	KΖ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	CH,	CY,	DE,	DK,	ES,	FI,	FR,	GB,
		GR,	ΙE,	ΙT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,
		GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG							
AU	2002	3133	09		A1		2004	0119		AU 2	002-	3133	09		2	0020	628
PRIORITY APPLN. INFO.:				. :						WO 2	002-	JP66	06		A 2	0020	628
OTHER SOURCE(S):					MAR:	PAT	140:	7703	5								
CT	\ - / -																

The title arylcarboxamides I [wherein R1 = halo, alkyl, alkoxy, NO2, OH, AB (un) substituted amino, aryl, aralkyl, heteroaryl, heteroaralkyl, cycloalkyl, or cycloalkenyl; ring Q = (un)substituted benzene, cyclohexane, pyridine, pyrazine, pyridazine, furan, thiophene, oxazole, thiazole, or imidazole; R2 = H, alkyl, hydroxyalkyl, acyloxyalkyl, hydroxycarbonylalkyl, alkoxycarbonylalkyl, or (un)substituted aminoalkyl; Z = CH or N; R3 = halo, CN, NO2, NH2, alkyl, alkoxy, CO2H, alkoxycarbonyl, carbamoyl, alkenyl, alkynyl, or haloalkyl; R4 = H, halo, CN, or NO2; R5 = alkyl, hydroxyalkyl, hydroxycarbonylalkyl, alkoxy, haloalkoxy, aryloxy, cycloalkyloxy, hydroxyalkoxy, hydroxycarbonylalkoxy, SH, alkylthio, hydroxyalkylthio, hydroxycarbonylalkylthio, (un)substituted aminoalkyl, aminoalkoxy, aminoalkylthio, OH, or NH2] or pharmaceutically acceptable salts thereof are prepared For example, the compound II was prepared in a multi-step synthesis. II showed IC50 of 0.049 μM against interleukin-4 production in rat. The compds. I are highly effective in inhibiting interleukin-4 production in type-2 helper T cells, and are useful for the treatment of allergic diseases (no data). Formulations containing I as an active ingredient were also described.

IT 476342-69-5P 640272-84-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of (hydroxypiperidinyl)arylcarboxamides for treatment of allergic diseases)

RN 476342-69-5 CAPLUS

CN 3-Pyridinecarboxamide, 5-(4-chlorophenyl)-N-[3-cyano-4-(4-hydroxy-1-piperidinyl)phenyl]- (CA INDEX NAME)

RN 640272-84-0 CAPLUS

CN 3-Pyridinecarboxamide, 5-(4-chlorophenyl)-N-[3-cyano-4-(4-hydroxy-1-piperidinyl)phenyl]-, hydrochloride (1:1) (CA INDEX NAME)

● HCl

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD

(3 CITINGS)

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 29 OF 37 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2003:950057 CAPLUS

DOCUMENT NUMBER: 140:16647

TITLE: Preparation of 2-aminopyridine-3-carboxamides as

remedies for angiogenesis mediated diseases

INVENTOR(S): Askew, Benny; Adams, Jeffrey; Booker, Shon; Chen,

Guoqing; DiPietro, Lucian V.; Elbaum, Daniel; Germain, Julie; Geuns-Meyer, Stephanie D.; Habgood, Gregory J.;

Handley, Michael; Huang, Qi; Kim, Tae-seong; Li, Aiwen; Nishimura, Nobuko; Nomak, Rana; Patel, Vinod F.; Riahi, Babak; Kim, Joseph L.; Xi, Ning; Yang,

Kevin; Yuan, Chester Chenguang

PATENT ASSIGNEE(S): Amgen Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 252 pp., Cont.-in-part of U.S.

Ser. No. 46,681. CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
US 20030225106 US 6878714	A1 20031204 B2 20050412	US 2002-197974	20020717
US 20030125339	A1 20030703	US 2002-46681	20020110
AT 361288	T 20070515	AT 2002-717325	20020111
PT 1358184 EP 1798230	E 20070531 A1 20070620	PT 2002-717325 EP 2007-3413	20020111 20020111
		FI, FR, GB, GR, IE,	
	TR, AL, LT, LV,		11, 11, 10, 110,
ES 2284849	T3 20071116	ES 2002-717325	20020111
ZA 2003005197	A 20040319		20030704
CA 2492100	A1 20040122		20030715
WO 2004007458	A1 20040122		20030715
		BA, BB, BG, BR, BY,	
		DZ, EC, EE, ES, FI,	
		JP, KE, KG, KP, KR,	
		MK, MN, MW, MX, MZ,	
		SG, SK, SL, TJ, TM,	TN, TR, TT, TZ,
·	VC, VN, YU, ZA,	•	GU VW VG DV
		SL, SZ, TZ, UG, ZM, BE, BG, CH, CY, CZ,	
		LU, MC, NL, PT, RO,	
		GN, GQ, GW, ML, MR,	
AU 2003252011		AU 2003-252011	20030715
AU 2003252011	B2 20071122	110 2000 202011	20000710
EP 1537084	A1 20050608	EP 2003-764794	20030715
R: AT, BE, CH,	DE, DK, ES, FR,	GB, GR, IT, LI, LU,	NL, SE, MC, PT,
		CY, AL, TR, BG, CZ,	
JP 2006501195	T 20060112	JP 2004-521959	20030715
BG 108012	A 20041130	BG 2003-108012	20030721
US 20050261313	A1 20051124	US 2004-14184	20041215
	A 20050419		20050113
US 20060040956	A1 20060223		20050923
	A 20091210	JP 2009-97317	20090413
PRIORITY APPLN. INFO.:		US 2001-261339P	
		US 2001-323764P	P 20010919
		US 2002-46681	A2 20020110
		EP 2002-717325	A3 20020111
		JP 2002-565984 US 2002-197974	A3 20020111 A 20020717
		WO 2003-US22417	W 20030715
ASSIGNMENT HISTORY FOR I	IS PATENT AWATIAR		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 140:16647

GΙ

AB The title compds. [I; R = (un)substituted 4-pyridyl, 2-pyridyl, 4-pyrimidinyl, 4-quinolyl, etc.; R1 = (un)substituted aryl, cycloalkyl, 5-6 membered heteroaryl, 9-10 membered bicyclic and 11-14 membered tricyclic heterocyclyl], which are effective for prophylaxis and treatment of diseases and other maladies or conditions involving, cancer and the like, were prepared Thus, the title compound II was prepared from 2-aminonicotinic acid, 4-chloroaniline, and 4-pyridinecarboxaldehyde. The compds. I showed inhibition of KDR kinase at < 50 $\mu \rm M$. Many compds. I inhibited VEGF-stimulated HUVEC proliferation at a level below 50 nM. Pharmaceutical composition comprising the compound I is claimed.

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 2-aminopyridine-3-carboxamides for treating angiogenesis mediated diseases)

RN 453561-26-7 CAPLUS

CN 3-Pyridinecarboxamide, N-(4-chlorophenyl)-5-(4-methoxyphenyl)-2-[(4-pyridinylmethyl)amino]- (CA INDEX NAME)

OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)

REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 30 OF 37 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2003:796416 CAPLUS

DOCUMENT NUMBER: 139:307686

TITLE: Preparation of 2,3-diphenylpyridines as cannabinoid-1

receptor antagonists and inverse agonists

INVENTOR(S): Finke, Paul E.; Meurer, Laura C.; Debenham, John S.;

Toupence, Richard B.; Walsh, Thomas F.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA SOURCE: PCT Int. Appl., 211 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'	PATENT NO.					D	DATE			APPL	ICAT	ION I	NO.		D.	ATE	
	2003 2003								;	WO 2	003-	US90	05		2	0030	324
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
								DM,									
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KR,	KZ,	LC,	LK,	LR,	LS,
		LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	OM,	PH,
		PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	ΤJ,	TM,	TN,	TR,	TT,	TZ,
		UA,	UG,	US,	UΖ,	VC,	VN,	YU,	ZA,	ZM,	ZW						
	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
		KG,	KΖ,	MD,	RU,	ΤJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FΙ,	FR,	GB,	GR,	HU,	ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,
		BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG
CA	2479	744			A1		2003	1009	1	CA 2	003-	2479	744		2	0030	324
AU	2003	2259	64		A1		2003	1013		AU 2	003-	2259	64		2	0030	324
AU	2003	2259	64		В2		2008	1120									
EP	1492	784			A2		2005	0105		EP 2	003-	7455	78		2	0030	324
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK	
	2005																
US	2005	0182	103		A1		2005	0818		US 2	004-	5080	43		2	0040	917
US	7271	266			В2		2007	0918									
PRIORIT	ORITY APPLN. INFO.:									US 2	002-	3683.	34P		P 2	0020	328
									,	WO 2	003-1	US90	05	1	W 2	0030	324
A C C T C NIMI	COMPAT HISTORY FOR					ידואיזיד	71 7 77	TTADI	יד קון	NT TC	TIC D	TODI	יים ער ע	$\triangle DMD$	T		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 139:307686

GΙ

$$R^4$$
 R^5
 R^3
 R^2
 R^6
 R^7
 R^7
 R^7

AΒ Title compds. I [wherein R1 = H, halo, CN, or (un)substituted alkyl, heterocycloalkyl(alkyl), heteroaryl, (hetero)arylalkyl, acyl, carboxy, (thio)ether, amino, carbamoyl, acylamino, carboxyamino, or ureido; R2 = H, CN, carboxy, halo, NO2, CF3, or (un)substituted carbamoyl; provided that R1 and R2 are not both H; R3 = H, CF3, or (un)substituted (cyclo)alkyl; R4-R7 = independently H, halo, amino, carboxy, alkyl, alkoxy, aryl(alkyl), OH, CF3, alkanoyloxy, or carbamoyloxy; provided that R6 and R7 are not both H; and pharmaceutically acceptable salts thereof] were prepared as cannabinoid-1 (CB1) receptor antagonists and/or inverse agonists (no data). For example, benzyl 4-chlorophenyl ketone was condensed with DMF dimethylacetal in DMF to give 3-(dimethylamino)-1-(4-chlorophenyl)-2phenylprop-2-en-1-one. Cyclocondensation of the vinyl ketone with cyanoacetamide using NaH in DMF and MeOH provided the 3-cyano-2-pyridone. Conversion of the nitrile to the carboxylic acid with 50% H2SO4, followed by esterification using HCl in MeOH gave Me 6-(4-chlorophenyl)-5-phenyl-2-oxo-1,2-dihydropyridine-3-carboxylate. O-alkylation of the pyridone with benzyl bromide in the presence of Cs2CO3 in DMF afforded the title 2,3-diphenylpyridine II. Compds. of the invention and their pharmaceutical compns. serve as centrally acting drugs for the treatment, prevention, and suppression of diseases mediated by the CB1 receptor, such as psychosis, memory deficits, cognitive disorders, migraine, neuropathy, neuro-inflammatory disorders including multiple sclerosis and Guillain-Barre syndrome, the inflammatory sequelae of viral encephalitis, cerebral vascular accidents, and head trauma, anxiety disorders, stress, epilepsy, Parkinson's disease, movement disorders, and schizophrenia (no data). I are also useful for the treatment of substance abuse disorders, obesity or eating disorders, asthma, constipation, chronic intestinal pseudo-obstruction, and cirrhosis of the liver (no data).

IT 611218-06-5P, N-Phenyl-2-methoxy-6-(4-chlorophenyl)-5phenylpyridine-3-carboxamide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(Uses)

(CB1 modulator; preparation of diphenylpyridines as CB1 antagonists and inverse agonists for treatment of eating disorders and other CB1 $\,$

mediated diseases)
RN 611218-06-5 CAPLUS

CN 3-Pyridinecarboxamide, 6-(4-chlorophenyl)-2-methoxy-N,5-diphenyl- (CA INDEX NAME)

OS.CITING REF COUNT: 26 THERE ARE 26 CAPLUS RECORDS THAT CITE THIS

RECORD (27 CITINGS)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 31 OF 37 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2002:900790 CAPLUS

DOCUMENT NUMBER: 137:384757
TITLE: Preparation of

N-[(hydroxypiperidinyl)phenyl]benzamides as

pharmaceuticals for treatment of atopic dermatitis,

asthma, and allergic rhinitis

INVENTOR(S): Naito, Yoichiro; Ushio, Hiroyuki; Hoshino, Yukio;

Kakoshima, Masahiko; Oshita, Koichi; Kataoka,

Hirotoshi; Chiba, Kenji

PATENT ASSIGNEE(S): Mitsubishi Pharma Corporation, Japan

Ι

SOURCE: Jpn. Kokai Tokkyo Koho, 29 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002338537	A	20021127	JP 2001-146915	20010516
PRIORITY APPLN. INFO.:			JP 2001-146915	20010516
OTHER SOURCE(S):	MARPAT	137:384757		
GI				

$$R^{2}$$
 Q
 R^{2}
 R^{3}
 R^{5}
 R^{4}

Amides I [R1 = halo, alkyl, alkoxy, NO2, amino, etc.; ring Q = (un)substituted benzene, cyclohexane, heterocyclic aromatic ring; R2 = H, alkyl, hydroxyalkyl, acyloxyalkyl, aminoalkyl, etc.; Z = CH, N; R3 = halo, cyano, NO2, amino, alkyl, alkoxy, CO2H, etc.; R4 = H, halo, cyano, NO2; R5 = alkyl, hydroxyalkyl, hydroxycarbonylalkyl, substituted aminoalkyl, OH, alkoxy, etc.] or their pharmaceutically acceptable salts are prepared The compds. are useful for inhibitors of interleukin 4 production from type 2 helper T cell. 5-Amino-2-(4-hydroxypiperidin-1-yl)benzonitrile (5 g) was reacted with 4-iodobenzoic acid in the presence of 1-hydroxybenzotriazole monohydrate and 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide hydrochloride in DMF at room temperature for 2 days to give 9.3 g N-[3-cyano-4-(4-hydroxypiperidin-1-yl)phenyl]-4-benzamide. The compds. controlled ovalbumin-induced edema in mice.

IT 476342-70-8P

RN

CN

RN

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of [(hydroxypiperidinyl)phenyl]benzamides as pharmaceuticals for treatment of atopic dermatitis, asthma, and allergic rhinitis) 476342-70-8 CAPLUS

3-Pyridinecarboxamide, 5-(4-chlorophenyl)-N-[3-cyano-4-(4-hydroxy-1-piperidinyl)phenyl]-, hydrochloride (1:?) (CA INDEX NAME)

•x HCl

IT 476342-69-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of [(hydroxypiperidinyl)phenyl]benzamides as pharmaceuticals for treatment of atopic dermatitis, asthma, and allergic rhinitis) 476342-69-5 CAPLUS

CN 3-Pyridinecarboxamide, 5-(4-chlorophenyl)-N-[3-cyano-4-(4-hydroxy-1-piperidinyl)phenyl]- (CA INDEX NAME)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L4 ANSWER 32 OF 37 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2002:658116 CAPLUS

DOCUMENT NUMBER: 137:201332

TITLE: Preparation of heterocyclylalkylamine derivatives as

remedies for angiogenesis mediated diseases

INVENTOR(S): Chen, Guoqinq; Adams, Jeffrey; Bemis, Jean; Booker,

Shon; Cai, Guolin; Croghan, Michael; DiPietro, Lucian; Dominguez, Celia; Elbaum, Daniel; Germain, Julie; Geuns-Meyer, Stephanie; Handley, Michael; Huang, Qi; Kim, Joseph L.; Kim, Tae-seong; Kiselyov, Alexander; Ouyang, Xiaohu; Patel, Vinod F.; Smith, Leon M.; Stec,

Markian; Tasker, Andrew; Xi, Ning; Xu, Shimin; Yuan, Chester Chenguang

PATENT ASSIGNEE(S): Amgen Inc., USA

SOURCE: PCT Int. Appl., 502 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PAT	ENT	NO.			KIND DATE					APPL				DATE				
WO	2002	 0664	 70		A1	_	2002	0829							2	0020	111	
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,	
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MΖ,	NO,	NΖ,	OM,	PH,	
		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ΤJ,	TM,	TN,	TR,	TT,	TZ,	
		UA,	UG,	UZ,	VN,	YU,	ZA,	ZW										
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑT,	BE,	CH,	
		CY,	DE,	DK,	ES,	FΙ,	FR,	GB,	GR,	ΙE,	ΙT,	LU,	MC,	NL,	PT,	SE,	TR,	
							CM,	•										
US	2003	0125	339		A1		2003	0703		US 2	002-	4668	1		2	0020	110	
US	6995	162			В2		2006	0207										
	2434						2002	0829		CA 2	002-	2434.	277		2	0020	111	
CA	2434	277			С		2009	0602										
ΑU	2002	2483	40		A1		2002	0904		AU 2	002-	2483	40	20020			111	
ΑU	2002	2483	-				2005	1103										
BR	2002	0064	35		Α		2003	0923		BR 2	002-	6435			2	0020	111	
EP	1358	184			A1		2003	1105		EP 2	002-	7173.	25		2	0020	111	
EP	1358	184			В1		2007	0502										
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙT,	LI,	LU,	NL,	SE,	MC,	PT,	

	IE, SI,	LT,	LV,	FI, RO, MK,	CY, AL, TR		
HU	2003002598		A2	20031128			20020111
EE	200300324		Α		EE 2003-324		20020111
JP	2004531484			20041014	JP 2002-565984		20020111
NZ	526868		Α		NZ 2002-526868		20020111
CN	1671700		Α	20050921	CN 2002-806202		20020111
CN	1313464		С	20070502			
AT	361288		T	20070515	AT 2002-717325		20020111
PT	1358184		E	20070531	PT 2002-717325		20020111
EP	1798230		A1	20070620	EP 2007-3413		20020111
	R: AT, BE,	CH,	CY,	DE, DK, ES,	FI, FR, GB, GR, IE,	IT, L	I, LU, MC,
	NL, PT,	SE,	TR,	AL, LT, LV,	MK, RO, SI		
ES	2284849		Т3	20071116	ES 2002-717325		20020111
	156751		Α	20090504	IL 2002-156751		20020111
ZA	2003005197		Α	20040319	ZA 2003-5197		20030704
	2003006179		Α				20030710
	2003003181		А				20030711
	2003CN01070		Α	20050422	IN 2003-CN1070		20030711
	848429		В1	20080728	KR 2003-709274		20030711
	108012		Α	20041130	BG 2003-108012		20030721
	1060131		A1	20071012	HK 2004-103164		20040505
	20060040956		A1	20060223	US 2005-234713		20050923
	2006200437		A1	20060223	AU 2006-200437		20060201
	2006200437		В2	20091112			
	2008CN03234		Α	20090306	IN 2008-CN3234		20080623
	2009286777		А	20091210	JP 2009-97317		20090413
PRIORITY	Y APPLN. INFO	.:			US 2001-261339P		20010112
					US 2001-323764P	P	20010919
					US 2002-46681	А	20020110
					AU 2002-248340	A3	20020111
					EP 2002-717325		20020111
					JP 2002-565984		20020111
					WO 2002-US743	W	20020111
					IN 2003-CN1070		20030711
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 137:201332
GI

$$R^{2}$$
 A^{1} XR^{1} A^{1} A^{2} YR A^{2}

AB Title compds. [I; A1, A2 independently = C, N; A = 5-, or 6-membered partially saturated heterocyclyl, 5-, or 6-membered heterocyclyl, 9-, or 10-membered fused partially saturated heterocyclyl, 9-, 10-, or 11-membered fused heteroaryl, naphthyl, 4-, 5-, or 6-membered cycloalkenyl; X =C:ZNR3, C:ZN(R3)R4; Z = O, S; Y = N:CH, NR5(CR6R7), R8N(R5)(CR6R7), NR5(CR6R7)R8; R = 5-, or 6-membered (un)substituted heterocyclyl, 9-, 10-, 11-membered heterocyclyl; R1 = 6-10-membered (un)substituted aryl, 5-, or 6-membered (un) substituted heterocyclyl, 9-11 membered (un) substituted fused heterocyclyl, cycloalkyl, cycloalkenyl; R2 = H, halo, oxo, SH, COOH, CHO; R3 = H, alkyl, 5-, or 6-membered heterocyclyl; R4 = alkylenyl, alkenylenyl, alkynylenyl; R5 = H, alkyl, aralkyl, C6H5; R6, R7 independently = H, halo, CN, alkyl; R6R7 = cycloalkyl; R8 = alkylenyl; etc.] are prepared and are effective for prophylaxis and treatment of diseases, such as angiogenesis mediated diseases. The invention encompasses novel compds., analogs, prodrugs and pharmaceutically acceptable derivs. thereof, pharmaceutical compns. and methods for prophylaxis and treatment of diseases and other maladies or conditions involving, cancer and the like. The subject invention also relates to processes for making such compds. as well as to intermediates useful in such processes. Thus, the title compound II was prepared from Me 3-amino-2-thiophenecarboxylate, 4-chloroaniline, and 4-pyridine carboxaldehyde via coupling reaction.

IT 453561-26-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of heterocyclylalkylamine derivs. as remedies for angiogenesis mediated diseases)

RN 453561-26-7 CAPLUS

CN 3-Pyridinecarboxamide, N-(4-chlorophenyl)-5-(4-methoxyphenyl)-2-[(4-pyridinylmethyl)amino]- (CA INDEX NAME)

OS.CITING REF COUNT: 17 THERE ARE 17 CAPLUS RECORDS THAT CITE THIS RECORD (29 CITINGS)

REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

INVENTOR(S):

ACCESSION NUMBER: 2000:227634 CAPLUS

DOCUMENT NUMBER: 132:265091

TITLE: Preparation of N-(benzamidophenyl)pyridinecarboxamides

and analogs as cytokine production inhibitors Brown, Dearg Sutherland; Brown, George Robert

PATENT ASSIGNEE(S): Zeneca Limited, UK
SOURCE: PCT Int. Appl., 138 pp.

PCT Int. Appl., 138 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO. WO 2000018738								APPLICATION NO.								
																9990	921
	W:	ΑE,	AL,	AM,								, BY,		CH,	CN,	CR,	CU,
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												, LR,					
		MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PΊ	, RO	, RU,	SD,	SE,	SG,	SI,	SK,
		SL,	ΤJ,	TM,	TR,	TT,	UA,	UG,	US,	UZ	, VN	, YU,	ZA,	ZW	•	•	·
	RW:	GH,	GM,	ΚE,	LS,	MW,	SD,	SL,	SZ,	TZ	Z, UG	, ZW,	ΑT,	BE,	CH,	CY,	DE,
		DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU	J, MC	, NL,	PT,	SE,	BF,	ВJ,	CF,
		CG,					GW,	ML,	MR,	NE	E, SN	, TD,	ΤG				
CA	2340	454			A1 A		2000	0406		CA	1999	-2340	454		1	9990	921
AU	9961	034			А		2000	0417		ΑU	1999	-6103	3 4		1	9990	
AU	7613	61			В2		2003	0605									
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EP	1115	707			A1		2001	0718		EΡ	1999	-9476	53		1	9990	921
EP	1115				В1		2003										
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GF	R, IT	, LI,	LU,	NL,	SE,	MC,	PT,
				LT,	LV,												
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JP	2002 5098 2541 2219	5253	58		Т		2002			JΡ	2000	-5721	.98		1	9990	
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RU	2219	171			C2		2003					-1113				9990	
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 132:265091

GΙ

AB R4Z4ZCONHZ1NHCOZ2R2 [I; R2 = Z3R3; R3 = (un)substituted heteroaryl; R4 = (di)(alkyl)amino(alkyl), heterocyclyl(alkyl), heteroaryl(alkyl), etc.; Z = (un)substituted phenylene; Z1= 2-halo- or -alkyl-1,5-phenylene; Z2 = bond or (CH2)1-4; Z3 = bond, O, NH, alkyleneoxy, alkyleneamino, etc.; Z4 = bond, alkylene(oxy), alkyleneamino,, etc.] were prepared as p38 kinase inhibitors. Thus, 3-(C1CH2)C6H4COC1 was amidated by

2-methyl-5-nitroaniline and the product aminated by 1-methylpiperazine to give, after reduction and pyridine-3-carbonyl chloride amidation, title compound

II. Data for biol. activity of I were given.

IT 263269-09-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of N-(benzamidophenyl)pyridinecarboxamides and analogs as cytokine production inhibitors)

RN 263269-09-6 CAPLUS

CN 3-Pyridinecarboxamide, N-[4-methyl-3-[[3-[(4-methyl-1-piperazinyl)methyl]benzoyl]amino]phenyl]-5-phenyl- (CA INDEX NAME)

OS.CITING REF COUNT: 14 THERE ARE 14 CAPLUS RECORDS THAT CITE THIS

RECORD (14 CITINGS)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 34 OF 37 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1995:995215 CAPLUS

DOCUMENT NUMBER: 124:117098

ORIGINAL REFERENCE NO.: 124:21809a,21812a

TITLE: Preparation of pyridylanilide derivatives as

fungicides

INVENTOR(S): Riordan, Peter Dominic; Boddy, Ian Kenneth; Osbourn,

Susan Elisabeth

PATENT ASSIGNEE(S): Agrevo UK Ltd., UK SOURCE: PCT Int. Appl., 35 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

P	PATENT NO.						KIND DATE			APPLICATION NO.						DATE			
_ W	0	9525723			A1 19950928			WO 1995-GB570						19950316					
		W:	AU,	BG,	BR,	CA,	CN,	CZ,	FI,	HU,	JP	P, I	KR,	KΖ,	MX,	NO,	NZ,	PL,	RO,
			RU,	SD,	SK,	UA,	US												
		RW:	KE,	MW,	SD,	SZ,	UG,	ΑT,	BE,	CH,	DE	Ξ, Ι	DK,	ES,	FR,	GB,	GR,	ΙE,	ΙΤ,
			LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG	3, (CI,	CM,	GΑ,	GN,	ML,	MR,	ΝE,
				TD,	ΤG														
	-				Α			AU 1995-18981							19950316				
		6884					1998	19980312											
		750611													19950316				
E	Р	7506				В1		1998											
				BE,	CH,			ES,		•									
_		1143				A		1997											
Н	U	7477	8			A2 19970228											19950316		
		2142						1998											
		9507						1997											
_		0951	-			T		1997	-		_			_	55				
		1680	-					1998	-						03			9950	
		9502				Α		1995										9950	-
		5756				А	19980526												
PRIORI	ΤY	APP:	LN.	INFO	.:													9940	
											WO	199	95-(3B57	0	,	W 1	9950	316

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 124:117098

GΙ

- AB Title compds. I [X = 0, S; R1, R2 = H, alkyl, cycloalkyl, alkenyl, etc.; R3 = (substituted) pyridyl, pyrimidinyl, pyrazinyl, etc.] were prepared Condensation of 6-methoxynicotinoyl chloride with Me anthranilate in the presence of Et3N in THF afforded I (X = 0; R1 = R2 = H; R3 = 6-methoxy-3-pyridyl) which showed activity against barley powdery mildew, rice blast and apple scab at \leq 500 ppm.
- IT 173056-43-4P 173057-56-2P 173058-11-2P
 RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of anilide derivs. as fungicides)
- RN 173056-43-4 CAPLUS
- CN Benzoic acid, 2-[[(6-methoxy-5-phenyl-3-pyridinyl)carbonyl]amino]-, methyl ester (CA INDEX NAME)

10/537,719

RN 173057-56-2 CAPLUS

CN Benzoic acid, 2-[[(5-phenyl-3-pyridinyl)carbonyl]amino]-, methyl ester (CA INDEX NAME)

RN 173058-11-2 CAPLUS

CN Benzoic acid, 2-[[[5-[4-(trifluoromethyl)phenyl]-3-pyridinyl]carbonyl]amino]-, methyl ester (CA INDEX NAME)

OS.CITING REF COUNT: 20 THERE ARE 20 CAPLUS RECORDS THAT CITE THIS

RECORD (31 CITINGS)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 35 OF 37 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1989:154162 CAPLUS

DOCUMENT NUMBER: 110:154162

ORIGINAL REFERENCE NO.: 110:25491a,25494a

TITLE: 4-Halopyridine-3-carboxamide derivatives and their

herbicidal compositions

INVENTOR(S): Yagihara, Hiroshi; Goto, Yukihisa; Masamoto, Kazuhisa;

Morishima, Yasuo; Osabe, Hirokazu

PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd., Japan

SOURCE: Eur. Pat. Appl., 32 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
EP 292990	A1	19881130	EP 1988-108501	19880527		
EP 292990	B1	19950201				
R: DE, FR, GB						
US 4978385	A	19901218	US 1988-199187	19880526		
JP 01207275	A	19890821	JP 1988-131265	19880527		
JP 2557468	B2	19961127				
CA 1320488	С	19930720	CA 1988-567874	19880527		
PRIORITY APPLN. INFO.:			JP 1987-131696 A	19870529		
			JP 1987-262333 A	19871016		

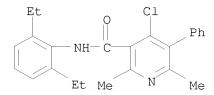
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): CASREACT 110:154162; MARPAT 110:154162 GI

Title compds. I [R1 = C1-11 alkyl, alkenyl, alkynyl, cycloalkyl, AΒ alkoxyalkyl, alkylthioalkyl, haloalkyl, 5- or 6-membered heterocyclyl, (un) substituted Ph or aralkyl; R2-R6 = H, halo, cyano, NO2, amino, alkyl, haloalkyl, OH, alkoxy, aryloxy, CO2H, alkoxycarbonyl; R7 = H, halo, alkyl, alkenyl, alkynyl, alkoxy, haloalkyl, (un)substituted Ph or aralkyl; R8 = as given for R1, or R7R8 = (CH2)m; m = 3, 4; X = halo] and their 1-oxides and salts are prepared as herbicides. 5-Allyl-N-(2,6-diethyl-4-methylphenyl)-1,4-dihydro-2,6-dimethyl-4-oxo-3pyridinecarboxamide was refluxed in excess POCl3 for 1 h to give allylchloro(diethylmethylphenyl)dimethylpyridinecarboxamide II. Addition of 50 weight parts II to 200 parts carrier containing talc 50, bentonite 25, Solpole-9047, 2, and Solpole-5039, 3 parts gave a wettable powder. As a 20-ppm aqueous dispersion applied to seedlings in a lab dish, II completely inhibited Oryzae sativa, Echinochloa crus-galli, and Raphanus sativus. ΙT 119766-14-2P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except

RN 119766-14-2 CAPLUS

CN 3-Pyridinecarboxamide, 4-chloro-N-(2,6-diethylphenyl)-2,6-dimethyl-5-phenyl- (CA INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L4 ANSWER 36 OF 37 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1989:38902 CAPLUS

DOCUMENT NUMBER: 110:38902

ORIGINAL REFERENCE NO.: 110:6479a,6482a

TITLE: Preparation of 4-hydroxy-3-pyridinecarboxamides as

antiinflammatory and antirheumatic agents

INVENTOR(S): Clemence, Francois; Le Martret, Odile; Delevallee,

Francoise

PATENT ASSIGNEE(S): Roussel-UCLAF, Fr. SOURCE: Ger. Offen., 17 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT	NO.	KIND	DATE	APE	PLICATION NO.		DATE	
DE 3808	444	A1	19880922	DE	1988-3808444	_	19880314	
FR 2612	189	A1	19880916	FR	1987-3465		19870313	
FR 2612	189	B1	19890623					
NL 8800	606	A	19881003	NL	1988-606		19880311	
JP 6324	3074	A	19881007	JΡ	1988-56457		19880311	
GB 2204	037	A	19881102	GB	1988-5869		19880311	
GB 2204	037	В	19910123					
CH 6752	45	A5	19900914	СН	1988-935		19880311	
US 4925	859	A	19900515	US	1988-167375		19880331	
US 4987	140	A	19910122	US	1989-441317		19891127	
PRIORITY APP	LN. INFO.:			FR	1987-3465	Α	19870313	
				US	1988-167375	АЗ	19880331	

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): CASREACT 110:38902; MARPAT 110:38902

GI

The title compds. [I; R = (un)substituted Ph, C1-5 alkyl-(un)substituted 5- or 6-membered heterocyclyl; R1, R2 = R, C1-5 alkyl, (un)substituted naphthyl; R3 = H, C1-5 alkyl, CF3(CF2)n, R4CHOH; R4 = C1-5 alkyl; n = 0-4] and their acid and base salts were prepared PhCN was condensed with BrCHPhCO2Et under reducing conditions to give H2NCPh:CPhCO2Et which was N-acylated with (CF3CO)2O and the product cyclized by heating in Ac2O to give oxazinone II. The latter was refluxed with BrCH2CO2Et and CH2(OMe)2 in the presence of Zn powder and catalytic iodine to give Et 4-hydroxy-5,6-diphenyl-2-(trifluoromethyl)-3-pyridinecarboxylate which was amidated with 2-thiazolamine to give I (R = 2-thiazolyl, R1 = R2 = Ph, R3 = CF3) (III). In the adjuvant arthritis test in rats III inhibited inflammation with an ED50 of 15 mg/kg orally.

IT 118289-02-4P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, as inflammation inhibitor)

RN 118289-02-4 CAPLUS

CN 3-Pyridinecarboxamide, 4-hydroxy-N,5,6-triphenyl-2-(trifluoromethyl)- (CA INDEX NAME)

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L4 ANSWER 37 OF 37 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1983:198028 CAPLUS

DOCUMENT NUMBER: 98:198028

ORIGINAL REFERENCE NO.: 98:30095a,30098a

TITLE: Pyridine derivatives inducing tillering and

agricultural compositions containing them

INVENTOR(S): Stacey, Gilbert Joseph; Hawkins, Alan Francis;

Pearson, David Philip John; Sunley, Raymond Leo

PATENT ASSIGNEE(S): Imperial Chemical Industries PLC, UK

SOURCE: Eur. Pat. Appl., 40 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

	67511 67511			A2 A3	19821222 19830406	EP	1982-302208		19820429
	R: AT	, BE,	CH,			LI, LU	J, NL, SE		
GB	2099421			A	19821208	GB	1982-12420		19820419
AU	8283671			A	19821125	AU	1982-83671		19820513
US	4473395			A	19840925	US	1982-379047		19820517
BR	8202876			A	19830426	BR	1982-2876		19820518
JP	5719726	7		A	19821203	JP	1982-83339		19820519
PRIORITY	APPLN.	INFO	.:			GB	1981-15251	A	19810519
						GB	1981-15252	A	19810519
						GB	1981-24941	A	19810814
						GB	1982-12420	A	19820419
						EP	1982-302208	A	19820429

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): CASREACT 98:198028; MARPAT 98:198028 GI

AB Phenylpyridine I [R = Ph, substituted Ph; R1 = cyano, carboxy, alkoxycarbonyl, alkylthiocarbonyl, carbamoyl; R2 = H, halogen, (un)substituted alkyl, OH, NH2, Ph, alkoxycarbonyl; n = 0, 1] were prepared Thus 4-ClC6H4CH2CO2H was treated with POCl3-DMF to give Me2NCH:C(CH0)C6H4Cl-4, which was cyclized with H2NCMe:CHCO2Et to form I (R = C6H4Cl-4; R1 = CO2Et; R2 = Me, n = 0)(II). II gave 132% of control barley tillering at 3 kg/ha.

II 85583-03-5P

85583-03-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation, reduction, and tillering-inducing activity of)

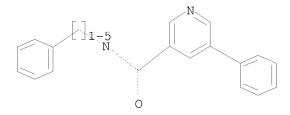
RN 85583-03-5 CAPLUS

CN 3-Pyridinecarboxamide, 5-(4-chlorophenyl)-2-methyl-N-phenyl- (CA INDEX NAME)

OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

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Structure attributes must be viewed using STN Express query preparation.

L3 365 SEA FILE=REGISTRY SSS FUL L1

L4 21 SEA FILE=CAPLUS L3

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L4 ANSWER 1 OF 21 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2009:594820 CAPLUS

DOCUMENT NUMBER: 151:23967

TITLE: Identifying Novel Molecular Structures for Advanced

Melanoma by Ligand-Based Virtual Screening

AUTHOR(S): Wang, Zhao; Lu, Yan; Seibel, William; Miller, Duane

D.; Li, Wei

CORPORATE SOURCE: Department of Pharmaceutical Sciences, College of

Pharmacy, University of Tennessee Health Science

Center, Memphis, TN, 38163, USA

SOURCE: Journal of Chemical Information and Modeling (2009),

49(6), 1420-1427

CODEN: JCISD8; ISSN: 1549-9596

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

We recently discovered a new class of thiazole analogs that are highly potent against melanoma cells. To expand the structure-activity relationship study and to explore potential new mol. scaffolds, we performed extensive ligand-based virtual screening against a compound library containing 342 910 small mols. Two different approaches of virtual screening were carried out using the structure of our lead mol.: (1) connectivity-based search using Scitegic Pipeline Pilot from Accelerys and (2) mol. shape similarity search using Schrodinger software. Using a testing compound library, both approaches can rank similar compds. very high and rank dissimilar compds. very low, thus validating our screening methods. Structures identified from these searches were analyzed, and selected compds. were tested in vitro to assess their activity against melanoma cancer cell lines. Several mols. showed good anticancer activity. While none of the identified compds. showed better activity than our lead compound, they provided important insight into structural modifications for our lead compound and also provided novel platforms on which we can optimize new classes of anticancer compds. One of the newly synthesized analogs based on this virtual screening has improved potency and selectivity against melanoma.

IT 1160108-27-9 1160108-28-0 1160108-29-1

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(identifying mol. structures for advanced melanoma by ligand-based virtual screening)

RN 1160108-27-9 CAPLUS

CN 3-Pyridinecarboxamide, N-[[4-(aminomethyl)phenyl]methyl]-5-[4-(1-(aminomethyl)phenyl]methyl]-5-[4-(1-(aminomethyl)phenyl]methyl]-5-[4-(1-(aminomethyl)phenyl]methyl]-5-[4-(1-(aminomethyl)phenyl]methyl]-5-[4-(1-(aminomethyl)phenyl]methyl]-5-[4-(1-(aminomethyl)phenyl]methyl]-5-[4-(1-(aminomethyl)phenyl]methyl]-5-[4-(1-(aminomethyl)phenyl]methyl]-5-[4-(1-(aminomethyl)phenyl]methyl]-5-[4-(1-(aminomethyl)phenyl]methyl]-5-[4-(1-(aminomethyl)phenyl]methyl]-5-[4-(1-(aminomethyl)phenyl]methyl]-5-[4-(1-(aminomethyl)phenyl]methyl]-5-[4-(1-(aminomethyl)phenyl]methyl]-5-[4-(1-(aminomethyl)phenyl]methyl]-5-[4-(aminomethyl)phenyl]methyl]-5-[4-(1-(aminomethyl)phenyl]methyl]-5-[4-(1-(aminomethyl)phenyl]methyl]-5-[4-(1-(aminomethyl)phenyl]methyl]-5-[4-(aminomethyl)phenyl]methyl]-5-[4-(aminomethyl)phenyl]methyl]-5-[4-(aminomethyl)phenyl]methyl]-5-[4-(aminomethyl)phenyl]methyl]-5-[4-(aminomethyl)phenyl]methyl]-5-[4-(aminomethyl)phenyl]methyl]-5-[4-(aminomethyl)phenyl]methyl]-5-[4-(aminomethyl)phenyl]methyl]-5-[4-(aminomethyl)phenyl]methyl]-5-[4-(aminomethyl)phenyl]methyl]-5-[4-(aminomethyl)phenyl]methyl]-5-[4-(aminomethyl)phenyl]methyl]-5-[4-(aminomethyl)phenyl]methyl]-5-[4-(aminomethyl)phenyl]methyl]-5-[4-(aminomethyl)phenyl]methyl]-5-[4-(aminomethyl)phenyl]methyl]-5-[4-(aminomethyl)phenyl]methyl]-5-[4-(aminomethyl)phenyl]methyllphenyl]methyllphenyllphe

methylethyl)phenyl]-N-(3,4,5-trimethoxyphenyl)- (CA INDEX NAME)

RN 1160108-28-0 CAPLUS

CN 3-Pyridinecarboxamide, N-[[4-(aminomethyl)phenyl]methyl]-5-[1,1'-biphenyl]-3-yl-N-[(3,4,5-trimethoxyphenyl)methyl]- (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} \\ \text{MeO} \\ \text{OMe} \end{array}$$

RN 1160108-29-1 CAPLUS

CN 3-Pyridinecarboxamide, N-(3-amino-2,2-dimethylpropyl)-5-[4-(1-methylethyl)phenyl]-N-[(3,4,5-trimethoxyphenyl)methyl]- (CA INDEX NAME)

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 2 OF 21 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2009:179582 CAPLUS

DOCUMENT NUMBER: 150:214187

TITLE: Preparation of therapeutic pyridine carboxamide orexin

receptor antagonists

Bergman, Jeffrey M.; Coleman, Paul J.; Fraley, Mark INVENTOR(S):

E.; Mercer, Swati P.; Reger, Thomas S.; Roecker,

Anthony J.; Steen, Justin T.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA

SOURCE: PCT Int. Appl., 90pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA.	PATENT NO.						KIND DATE			APPL	ICAT	DATE						
WO	2009020642				A1 20090212				WO 2	008-1		20080807						
	W:	ΑE,	AG,	AL,	AM,	AO,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	
		CA,	CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	
		FΙ,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	
		KG,	KM,	KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	
		ME,	MG,	MK,	MN,	MW,	MX,	MY,	MΖ,	NA,	NG,	NΙ,	NO,	NZ,	OM,	PG,	PH,	
		PL,	PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	ST,	SV,	SY,	ТJ,	
		TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW			
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HR,	HU,	
		ΙE,	IS,	ΙΤ,	LT,	LU,	LV,	MC,	MT,	NL,	NO,	PL,	PT,	RO,	SE,	SI,	SK,	
		TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	
		TG,	BW,	GH,	GM,	ΚE,	LS,	MW,	MΖ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	
		ΑM,	ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM								
PRIORIT	PRIORITY APPLN. INFO.:									US 2007-964111P						P 20070809		
OTHER SO	OTHER SOURCE(S):					MARPAT 150:214187												

GΙ

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* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *
AB
     The present invention is directed to pyridyl carboxamide compds. of
     general formula I (wherein A1 and A2 are Ph, naphthyl, and heteroaryl; A3
     is Ph, naphthyl, heteroaryl, and C3-6cycloalkyl; R1a-R1c, R2a-R2c, and
     R3a-R3c are independently H, halo, OH, etc., or may be absent; R4 and R5
     are H, (un) substituted C1-6alkyl, or together may form part of a
     cycloalkyl ring; R6 is H, C1-6alkyl, and C3-6 cycloalkyl that are
     optionally substituted) which are antagonists of orexin receptors, and
     which are useful in the treatment or prevention of neurol. and psychiatric
     disorders and diseases in which orexin receptors are involved. The
     invention is also directed to pharmaceutical compns. comprising these
     compds. and the use of these compds. and compns. in the prevention or
     treatment of such diseases in which orexin receptors are involved.
     Synthetic procedures for preparing I are exemplified. Example compound II was
     prepared in a 4 step synthesis which culminated in the reaction of
     6-(2-fluorophenyl)-5'-methyl-3,3'-bipyridine-5-carboxylic acid
     hydrochloride with 1-(5,6-dimethoxypyridin-2-yl)methanamine. II had a Ki
     of 0.74 nM in an assay that measured antagonism of OX2R receptors.
     1112849-68-9P, N-(3,4-Dimethoxybenzyl)-5-(3,5-dimethylphenyl)-2-
ΙT
     (1-methyl-1H-pyrazol-4-yl)nicotinamide
                                              1112849-69-0P,
     N-(3,4-Dimethoxybenzyl)-5-(3,5-dimethylphenyl)-6'-fluoro-2,3'-bipyridine-3-
     carboxamide
                   1112849-71-4P,
     N-(3,4-Dimethoxybenzyl)-5-(3,5-dimethylphenyl)-2-(quinolin-3-
     yl)nicotinamide
                      1112849-74-7P,
     N-(3, 4-Dimethoxybenzyl)-5-(3, 5-dimethylphenyl)-2-(3-
     hydroxyphenyl)nicotinamide 1112849-75-8P,
     N-(3, 4-Dimethoxybenzyl)-5-(3, 5-dimethylphenyl)-2-[3-
                                                   1112849-76-9P,
     [(methylamino)carbonyl]phenyl]nicotinamide
     N-(3,4-Dimethoxybenzy1)-2-[3-[(dimethylamino)methyl]phenyl]-5-(3,5-
     dimethylphenyl)nicotinamide
                                   1112849-77-0P,
     N-(3,4-Dimethoxybenzy1)-5-(3,5-dimethylpheny1)-2-(1H-indol-5-
     yl)nicotinamide
                       1112849-79-2P,
     5-(3,5-Dimethylphenyl)-N-[(1R)-1-(3-methoxyphenyl)ethyl]-2-(1-methyl-1H-1)
     pyrazol-4-yl)nicotinamide
                                 1112849-85-0P,
     5-(3,5-Dichlorophenyl)-N-[(2,3-dimethyl-1H-indol-6-yl)methyl]-2-(1-methyl-1H-indol-6-yl)methyl]
     1H-pyrazol-4-yl)nicotinamide
                                    1112849-87-2P,
     5-(3-Fluoro-5-methylphenyl)-2-(1-methyl-1H-pyrazol-4-yl)-N-[(1R)-1-(2-methyl-1H-pyrazol-4-yl)]
     naphthyl)ethyl]nicotinamide 1112849-89-4P,
     5-(3,5-Dimethylphenyl)-2-(1-methyl-1H-pyrazol-4-yl)-N-[(2-
     naphthyl)methyl]nicotinamide
                                   1112849-92-9P,
     5-(3-Fluoro-5-methylphenyl)-2-(1-methyl-1H-pyrazol-4-yl)-N-[(2-methyl-1H-pyrazol-4-yl)]
     naphthyl)methyl]nicotinamide
                                    1112849-99-6P,
     5-(3-Chloro-5-methylphenyl)-N-(3,4-dimethoxybenzyl)-2-(1-methyl-1H-pyrazol-
                         1112850-01-7P,
     4-yl)nicotinamide
     5-(3-Fluoro-5-methylphenyl)-N-[1-(3,4-dimethoxyphenyl)ethyl]-2-(1-methyl-
     1H-pyrazol-4-yl)nicotinamide
                                    1112850-03-9P,
     5-(3-Fluoro-5-methylphenyl)-N-(3,4-dimethoxybenzyl)-2-(1-methyl-1H-pyrazol-
     4-yl)nicotinamide
                         1112850-04-0P,
     5-(3-\text{Chloro}-5-\text{methylphenyl})-N-[(2,3-\text{dimethyl}-1H-\text{indol}-5-\text{yl})\text{methyl}]-2-(1-\text{methyl}-1H-\text{methyl})
     methyl-1H-pyrazol-4-yl)nicotinamide
                                            1112850-07-3P,
     5-(3-Chloro-5-methylphenyl)-N-[(2-naphthyl)methyl]-2-(1-methyl-1H-pyrazol-
     4-yl)nicotinamide
                        1112850-09-5P,
     5-(3-Fluoro-5-methylphenyl)-N-(3,4-dimethoxybenzyl)-2-(pyridazin-3-
     yl)nicotinamide
                       1112850-11-9P,
     5-(3-Chloro-5-methylphenyl)-N-(3,4-dichlorobenzyl)-2-(1-methyl-1H-pyrazol-
     4-yl)nicotinamide 1112850-12-0P,
     5-(3-Fluoro-5-methylphenyl)-N-[1-(3,4-dimethoxyphenyl)ethyl]-6'-fluoro-
     2,3'-bipyridine-3-carboxamide 1112850-14-2P,
     5-(3,5-Dichlorophenyl)-N-(3,4-dimethoxybenzyl)-5'-chloro-2,3'-bipyridine-3-
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RN

CN

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carboxamide
              1112850-19-7P,
5-(3-Chloro-5-methylphenyl)-N-[(1-methyl-2,3-dihydro-1H-indol-5-yl)methyl]-
2-(1-\text{methyl}-1\text{H}-\text{pyrazol}-4-\text{yl}) nicotinamide 1112850-20-0\text{P},
5-(3-Chloro-5-methylphenyl)-N-[(1,4-dimethyl-1,2,3,4-tetrahydroquinoxalin-
6-yl)methyl]-2-(1-methyl-1H-pyrazol-4-yl)nicotinamide
1112850-24-4P, 5-(3-Fluoro-5-methylphenyl)-N-(3,4-dimethoxybenzyl)-
2-(1-\text{methyl}-1\text{H-pyrazol}-5-\text{yl}) nicotinamide 1112850-27-7P,
5-(3-Chloro-5-methylphenyl)-N-(3,4-dihydroxybenzyl)-2-(1-methyl-1H-pyrazol-
4-y1) nicotinamide 1112850-71-1P,
5-(3-Chloro-5-methylphenyl)-N-(3,4-dimethoxybenzyl)-2-(morpholin-4-
yl)nicotinamide
                 1112850-72-2P,
5-(3-Chloro-5-methylphenyl)-N-(3,4-dimethoxybenzyl)-2-(piperidin-1-
                 1112850-75-5P,
yl)nicotinamide
5-(3-Chloro-5-methylphenyl)-N-(3,4-dimethoxybenzyl)-2-(pyrrolidin-1-
yl)nicotinamide 1112850-78-8P,
2-(Azetidin-1-y1)-5-(3-chloro-5-methylphenyl)-N-(3,4-
                              1112850-79-9P,
dimethoxybenzyl)nicotinamide
5-(3,5-Dichlorophenyl)-N-(3,4-dimethoxybenzyl)-2-(3-methoxyazetidin-1-
vl)nicotinamide
                 1112850-80-2P,
5-(3,5-Dichlorophenyl)-N-(3,4-dimethoxybenzyl)-2-(3-fluoroazetidin-1-
yl)nicotinamide
                  1112850-82-4P
                                     1112850-85-7P,
5-(3-Chloro-5-methylphenyl)-N-(3,4-dimethoxybenzyl)-2-(4-
thiomorpholinyl) nicotinamide
                              1112851-07-6P,
N-(3-Chloro-4-methoxybenzyl)-5-(3-fluoro-5-methoxyphenyl)-2-(1H-pyrazol-1-
                  1112851-19-0P,
yl)nicotinamide
5-(3-Chloro-5-methylphenyl)-N-(3,4-dimethoxybenzyl)-2-(4-methyl-1H-pyrazol-
1-vl)nicotinamide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
   (drug candidate; preparation of therapeutic pyridine carboxamide orexin
   receptor antagonists)
1112849-68-9 CAPLUS
3-Pyridinecarboxamide, N-[(3,4-dimethoxyphenyl)methyl]-5-(3,5-
dimethylphenyl)-2-(1-methyl-1H-pyrazol-4-yl)- (CA INDEX NAME)
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RN 1112849-69-0 CAPLUS CN [2,3'-Bipyridine]-3-carboxamide, N-[(3,4-dimethoxyphenyl)methyl]-5-(3,5-dimethylphenyl)-6'-fluoro- (CA INDEX NAME)

RN 1112849-71-4 CAPLUS

CN 3-Pyridinecarboxamide, N-[(3,4-dimethoxyphenyl)methyl]-5-(3,5-dimethylphenyl)-2-(3-quinolinyl)- (CA INDEX NAME)

RN 1112849-74-7 CAPLUS

CN 3-Pyridinecarboxamide, N-[(3,4-dimethoxyphenyl)methyl]-5-(3,5-dimethylphenyl)-2-(3-hydroxyphenyl)- (CA INDEX NAME)

RN 1112849-75-8 CAPLUS

CN 3-Pyridinecarboxamide, N-[(3,4-dimethoxyphenyl)methyl]-5-(3,5-dimethylphenyl)-2-[3-[(methylamino)carbonyl]phenyl]- (CA INDEX NAME)

RN 1112849-76-9 CAPLUS

CN 3-Pyridinecarboxamide, N-[(3,4-dimethoxyphenyl)methyl]-2-[3- [(dimethylamino)methyl]phenyl]-5-(3,5-dimethylphenyl)- (CA INDEX NAME)

1112849-77-0 CAPLUS

RN

CN 3-Pyridinecarboxamide, N-[(3,4-dimethoxyphenyl)methyl]-5-(3,5-dimethylphenyl)-2-(1H-indol-5-yl)- (CA INDEX NAME)

RN 1112849-79-2 CAPLUS

CN 3-Pyridinecarboxamide, 5-(3,5-dimethylphenyl)-N-[(1R)-1-(3-methoxyphenyl)ethyl]-2-(1-methyl-1H-pyrazol-4-yl)- (CA INDEX NAME)

Absolute stereochemistry.

RN 1112849-85-0 CAPLUS

CN 3-Pyridinecarboxamide, 5-(3,5-dichlorophenyl)-N-[(2,3-dimethyl-1H-indol-6-yl)methyl]-2-(1-methyl-1H-pyrazol-4-yl)- (CA INDEX NAME)

RN 1112849-87-2 CAPLUS

CN 3-Pyridinecarboxamide, 5-(3-fluoro-5-methylphenyl)-2-(1-methyl-1H-pyrazol-4-yl)-N-[(1R)-1-(2-naphthalenyl)ethyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 1112849-89-4 CAPLUS

CN 3-Pyridinecarboxamide, 5-(3,5-dimethylphenyl)-2-(1-methyl-1H-pyrazol-4-yl)-N-(2-naphthalenylmethyl)- (CA INDEX NAME)

RN 1112849-92-9 CAPLUS

CN 3-Pyridinecarboxamide, 5-(3-fluoro-5-methylphenyl)-2-(1-methyl-1H-pyrazol-4-yl)-N-(2-naphthalenylmethyl)- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\$$

RN 1112849-99-6 CAPLUS

CN 3-Pyridinecarboxamide, 5-(3-chloro-5-methylphenyl)-N-[(3,4-dimethoxyphenyl)methyl]-2-(1-methyl-1H-pyrazol-4-yl)- (CA INDEX NAME)

RN 1112850-01-7 CAPLUS

CN 3-Pyridinecarboxamide, N-[1-(3,4-dimethoxyphenyl)ethyl]-5-(3-fluoro-5-methylphenyl)-2-(1-methyl-1H-pyrazol-4-yl)- (CA INDEX NAME)

RN 1112850-03-9 CAPLUS

CN 3-Pyridinecarboxamide, N-[(3,4-dimethoxyphenyl)methyl]-5-(3-fluoro-5-methylphenyl)-2-(1-methyl-1H-pyrazol-4-yl)- (CA INDEX NAME)

RN 1112850-04-0 CAPLUS

CN 3-Pyridinecarboxamide, 5-(3-chloro-5-methylphenyl)-N-[(2,3-dimethyl-1H-indol-5-yl)methyl]-2-(1-methyl-1H-pyrazol-4-yl)- (CA INDEX NAME)

RN 1112850-07-3 CAPLUS

CN 3-Pyridinecarboxamide, 5-(3-chloro-5-methylphenyl)-2-(1-methyl-1H-pyrazol-4-y1)-N-(2-naphthalenylmethyl)- (CA INDEX NAME)

RN 1112850-09-5 CAPLUS

CN 3-Pyridinecarboxamide, N-[(3,4-dimethoxyphenyl)methyl]-5-(3-fluoro-5-methylphenyl)-2-(3-pyridazinyl)- (CA INDEX NAME)

RN 1112850-11-9 CAPLUS

CN 3-Pyridinecarboxamide, 5-(3-chloro-5-methylphenyl)-N-[(3,4-dichlorophenyl)methyl]-2-(1-methyl-1H-pyrazol-4-yl)- (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \\ \text{N} \\ \\ \text{N} \\ \\ \text{C1} \\ \\ \text{C1} \\ \\ \text{Me} \\ \\ \\ \text{C1} \\ \\ \text{Me} \\ \\ \\ \text{C2} \\ \\ \text{Me} \\ \\ \\ \text{C3} \\ \\ \text{Me} \\ \\ \\ \text{C4} \\ \\ \text{C2} \\ \\ \text{Me} \\ \\ \\ \text{C3} \\ \\ \text{C4} \\ \\ \text{C4} \\ \\ \text{C5} \\ \\ \text{C6} \\ \\ \text{C6} \\ \\ \text{C7} \\ \\ \text{C7} \\ \\ \text{C7} \\ \\ \text{C8} \\ \\ \text$$

RN 1112850-12-0 CAPLUS

CN [2,3'-Bipyridine]-3-carboxamide, N-[1-(3,4-dimethoxyphenyl)ethyl]-6'-fluoro-5-(3-fluoro-5-methylphenyl)- (CA INDEX NAME)

RN 1112850-14-2 CAPLUS

CN [2,3'-Bipyridine]-3-carboxamide, 5'-chloro-5-(3,5-dichlorophenyl)-N-[(3,4-dimethoxyphenyl)methyl]- (CA INDEX NAME)

RN 1112850-19-7 CAPLUS

CN 3-Pyridinecarboxamide, 5-(3-chloro-5-methylphenyl)-N-[(2,3-dihydro-1-methyl-1H-indol-5-yl)methyl]-2-(1-methyl-1H-pyrazol-4-yl)- (CA INDEX NAME)

RN 1112850-20-0 CAPLUS

CN 3-Pyridinecarboxamide, 5-(3-chloro-5-methylphenyl)-2-(1-methyl-1H-pyrazol-4-yl)-N-[(1,2,3,4-tetrahydro-1,4-dimethyl-6-quinoxalinyl)methyl]- (CA INDEX NAME)

RN 1112850-24-4 CAPLUS

CN 3-Pyridinecarboxamide, N-[(3,4-dimethoxyphenyl)methyl]-5-(3-fluoro-5-methylphenyl)-2-(1-methyl-1H-pyrazol-5-yl)- (CA INDEX NAME)

RN 1112850-27-7 CAPLUS

CN 3-Pyridinecarboxamide, 5-(3-chloro-5-methylphenyl)-N-[(3,4-dihydroxyphenyl)methyl]-2-(1-methyl-1H-pyrazol-4-yl)- (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \\ \text{N} \\ \\ \text{O} \\ \\ \text{N} \\ \\ \text{N}$$

RN 1112850-71-1 CAPLUS

CN 3-Pyridinecarboxamide, 5-(3-chloro-5-methylphenyl)-N-[(3,4-dimethoxyphenyl)methyl]-2-(4-morpholinyl)- (CA INDEX NAME)

RN 1112850-72-2 CAPLUS

CN 3-Pyridinecarboxamide, 5-(3-chloro-5-methylphenyl)-N-[(3,4-dimethoxyphenyl)methyl]-2-(1-piperidinyl)- (CA INDEX NAME)

RN 1112850-75-5 CAPLUS

CN 3-Pyridinecarboxamide, 5-(3-chloro-5-methylphenyl)-N-[(3,4-dimethoxyphenyl)methyl]-2-(1-pyrrolidinyl)- (CA INDEX NAME)

RN 1112850-78-8 CAPLUS

CN 3-Pyridinecarboxamide, 2-(1-azetidiny1)-5-(3-chloro-5-methylpheny1)-N-[(3,4-dimethoxypheny1)methyl]- (CA INDEX NAME)

RN 1112850-79-9 CAPLUS

CN 3-Pyridinecarboxamide, 5-(3,5-dichlorophenyl)-N-[(3,4-dimethoxyphenyl)methyl]-2-(3-methoxy-1-azetidinyl)- (CA INDEX NAME)

RN 1112850-80-2 CAPLUS

CN 3-Pyridinecarboxamide, 5-(3,5-dichlorophenyl)-N-[(3,4-dimethoxyphenyl)methyl]-2-(3-fluoro-1-azetidinyl)- (CA INDEX NAME)

RN 1112850-82-4 CAPLUS

CN 3-Pyridinecarboxamide, 5-(3-chloro-5-methylphenyl)-N-[(3,4-dimethoxyphenyl)methyl]-2-[(3R)-3-fluoro-1-pyrrolidinyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 1112850-85-7 CAPLUS

CN 3-Pyridinecarboxamide, 5-(3-chloro-5-methylphenyl)-N-[(3,4-dimethoxyphenyl)methyl]-2-(4-thiomorpholinyl)- (CA INDEX NAME)

RN 1112851-07-6 CAPLUS

CN 3-Pyridinecarboxamide, N-[(3-chloro-4-methoxyphenyl)methyl]-5-(3-fluoro-5-methoxyphenyl)-2-(1H-pyrazol-1-yl)- (CA INDEX NAME)

RN 1112851-19-0 CAPLUS

CN 3-Pyridinecarboxamide, 5-(3-chloro-5-methylphenyl)-N-[(3,4-dimethoxyphenyl)methyl]-2-(4-methyl-1H-pyrazol-1-yl)- (CA INDEX NAME)

IT 1112849-67-8P, 2-Chloro-N-(3,4-dimethoxybenzyl)-5-(3,5-

dimethylphenyl)nicotinamide

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of therapeutic pyridine carboxamide orexin receptor antagonists)

RN 1112849-67-8 CAPLUS

CN 3-Pyridinecarboxamide, 2-chloro-N-[(3,4-dimethoxyphenyl)methyl]-5-(3,5-dimethylphenyl)- (CA INDEX NAME)

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 2 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 3 OF 21 CAPLUS COPYRIGHT 2010 ACS on STN

2008:1102334 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 149:355713

TITLE: Preparation of bipyridine carboxamide orexin receptor

antagonists

Coleman, Paul J.; Mercer, Swati P.; Roecker, Anthony INVENTOR(S):

J.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA SOURCE: PCT Int. Appl., 51pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA'	TENT	NO.			KIND DATE					APPL	ICAT		DATE				
WO	2008108991			A1 20080912				WO 2	008-	JS27:	20080229						
	W:	ΑE,	AG,	AL,	AM,	AO,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,
		CA,	CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,
		FI,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,
		KG,	KM,	KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,
		ME,	MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,
		PL,	PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ΤJ,	TM,
		TN,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	ZA,	ZM,	ZW			
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HR,	HU,
		ΙE,	IS,	ΙT,	LT,	LU,	LV,	MC,	MT,	NL,	NO,	PL,	PT,	RO,	SE,	SI,	SK,
		TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,
		ΤG,	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,
		ΑM,	ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ΤJ,	$^{\mathrm{TM}}$							
AU	2008	2235	46		A1		2008	0912		AU 2	008-	2235	20080229				
CA	2679	817			A1		2008	0912		CA 2	008-	2679	20080229				
EP	2131	654			A1		2009	1216		EP 2	-800	7262	93		2	0080	229
	R:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HR,	HU,
		ΙE,	IS,	ΙT,	LI,	LT,	LU,	LV,	MC,	MT,	NL,	NO,	PL,	PT,	RO,	SE,	SI,
		SK,	TR														
PRIORIT	IORITY APPLN. INFO.:								US 2007-904511P					P 20070302			
									WO 2008-US2725					W 20080229			
OTHER SO						MARPAT 149:355713											

GΙ

RN

RN

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AΒ The title compds. I [A1, A2 = Ph, naphthyl, hetreoaryl; R11, R12, R13 = absent, H, halo, OH, etc.; R21, R22, R23 = absent, H, halo, OH, etc.; R3 = H, alkyl, cycloalkyl; R4, R5 = H, alkyl; or R4 and R5 may be joined together to form cycloalkyl] which are antagonists of orexin receptors, and which are useful in the treatment or prevention of neurol. and psychiatric disorders and diseases in which orexin receptors are involved, were prepared E.g., a multi-step synthesis of II, starting from Me 3-oxo-3-(pyridin-3-yl)propanoate and N-[(2Z)-2-chloro-3-(dimethylamino)-prop-2-en-1-ylidene]-Nmethylmethanaminium hexafluorophosphate, was given. Exemplified compds. I showed activity in antagonizing the rat orexin-1 receptor and/or the human orexin-2 receptor, generally with an IC50 of less than about 50 μM . The invention is also directed to pharmaceutical compns. comprising compds. I and the use of these compds. and compns. in the prevention or treatment of such diseases in which orexin receptors are involved.

ΙT 1056416-78-4P 1056416-83-1P 1056416-88-6P 1056416-95-5P 1056417-02-7P 1056417-09-4P 1056417-15-2P 1056417-22-1P 1056417-29-8P 1056417-35-6P 1056417-42-5P 1056417-48-1P 1056417-62-9P 1056417-55-0P 1056417-69-6P 1056417-76-5P 1056417-83-4P 1056417-89-0P 1056417-96-9P 1056418-03-1P 1056418-10-0P 1056418-17-7P 1056418-23-5P 1056418-45-1P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU

(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of bipyridine carboxamide or exin receptor antagonists) 1056416-78-4 CAPLUS

CN [2,3'-Bipyridine]-3-carboxamide, N-[(3,4-dimethoxyphenyl)methyl]-5-(3,5-dimethylphenyl)- (CA INDEX NAME)

1056416-83-1 CAPLUS

CN [2,3'-Bipyridine]-3-carboxamide, 5-(3,5-dichlorophenyl)-N-[(3,4-dimethoxyphenyl)methyl]- (CA INDEX NAME)

RN 1056416-88-6 CAPLUS

CN [2,3'-Bipyridine]-3-carboxamide, 5-(3,5-dimethylphenyl)-N-(6-quinoxalinylmethyl)- (CA INDEX NAME)

Me Me N C NH
$$CH_2$$
 N

RN 1056416-95-5 CAPLUS

CN [2,3'-Bipyridine]-3-carboxamide, 5-(3,5-dimethylphenyl)-N-[[3-(trifluoromethyl)phenyl]methyl]- (CA INDEX NAME)

RN 1056417-02-7 CAPLUS

CN [2,3'-Bipyridine]-3-carboxamide, 5-(3,5-dimethylphenyl)-N-[(3-methoxyphenyl)methyl]- (CA INDEX NAME)

RN 1056417-09-4 CAPLUS

CN [2,3'-Bipyridine]-3-carboxamide, N-[[4-(1,1-dimethylethoxy)phenyl]methyl]- 5-(3,5-dimethylphenyl)- (CA INDEX NAME)

RN 1056417-15-2 CAPLUS

CN [2,3'-Bipyridine]-3-carboxamide, N-[[3-(difluoromethoxy)phenyl]methyl]-5-(3,5-dimethylphenyl)- (CA INDEX NAME)

RN 1056417-22-1 CAPLUS

CN [2,3'-Bipyridine]-3-carboxamide, N-[(3-bromophenyl)methyl]-5-(3,5-dimethylphenyl)- (CA INDEX NAME)

RN 1056417-29-8 CAPLUS

CN [2,3'-Bipyridine]-3-carboxamide, 5-(3,5-dimethylphenyl)-N-[(4-methoxyphenyl)methyl]- (CA INDEX NAME)

RN 1056417-35-6 CAPLUS

CN [2,3'-Bipyridine]-3-carboxamide, 5-(3,5-dimethylphenyl)-N-[(4-fluoro-3-methylphenyl)methyl]- (CA INDEX NAME)

$$\begin{array}{c|c} Me & N \\ \hline \\ CH_2-NH-C & N \\ \hline \\ Me & Me \end{array}$$

RN 1056417-42-5 CAPLUS

CN [2,3'-Bipyridine]-3-carboxamide, N-[(3-bromo-4-fluorophenyl)methyl]-5-(3,5-dimethylphenyl)- (CA INDEX NAME)

RN 1056417-48-1 CAPLUS

CN [2,3'-Bipyridine]-3-carboxamide, 5-(3,5-dimethylphenyl)-N-[[3-fluoro-4-(trifluoromethyl)phenyl]methyl]- (CA INDEX NAME)

RN 1056417-55-0 CAPLUS

CN [2,3'-Bipyridine]-3-carboxamide, N-[[4-(dimethylamino)phenyl]methyl]-5-(3,5-dimethylphenyl)- (CA INDEX NAME)

RN 1056417-62-9 CAPLUS

CN [2,3'-Bipyridine]-3-carboxamide, N-[(2,3-dihydro-1-methyl-1H-indol-5-yl)methyl]-5-(3,5-dimethylphenyl)- (CA INDEX NAME)

RN 1056417-69-6 CAPLUS

CN [2,3'-Bipyridine]-3-carboxamide, N-[(3,4-dichlorophenyl)methyl]-5-(3,5-dimethylphenyl)- (CA INDEX NAME)

$$\begin{array}{c|c} C1 & & N \\ \hline \\ CH_2-NH-C-N \\ \hline \\ Me & Me \\ \end{array}$$

RN 1056417-76-5 CAPLUS

CN [2,3'-Bipyridine]-3-carboxamide, 5-(3,5-dimethylphenyl)-N-(2-naphthalenylmethyl)- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RN 1056417-83-4 CAPLUS

CN [2,3'-Bipyridine]-3-carboxamide, 5-(3-chloro-5-fluorophenyl)-N-[(3,4-dimethoxyphenyl)methyl]- (CA INDEX NAME)

RN 1056417-89-0 CAPLUS

CN [2,3'-Bipyridine]-3-carboxamide, N-[(3,4-dimethoxyphenyl)methyl]-5-(3-fluoro-5-methylphenyl)- (CA INDEX NAME)

RN 1056417-96-9 CAPLUS

CN [2,3'-Bipyridine]-3-carboxamide, 5-(3,5-difluorophenyl)-N-[(3,4-dimethoxyphenyl)methyl]- (CA INDEX NAME)

RN 1056418-03-1 CAPLUS

CN [2,3'-Bipyridine]-3-carboxamide, 5-(3-chlorophenyl)-N-[(3,4-dimethoxyphenyl)methyl]- (CA INDEX NAME)

RN 1056418-10-0 CAPLUS

CN [2,3'-Bipyridine]-3-carboxamide, N-[(2,3-dimethyl-1H-indol-5-yl)methyl]-5-phenyl- (CA INDEX NAME)

RN 1056418-17-7 CAPLUS

CN [2,3'-Bipyridine]-3-carboxamide, 5-(3-fluorophenyl)-N-[(1R)-1-(2-naphthalenyl)ethyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 1056418-23-5 CAPLUS

CN [2,3'-Bipyridine]-3-carboxamide, N-[(2,3-dihydro-1,4-benzodioxin-6-

yl)methyl]-5-(3,5-dimethylphenyl)- (CA INDEX NAME)

RN 1056418-45-1 CAPLUS

CN [2,3'-Bipyridine]-3-carboxamide, 5-(1-methyl-1H-benzotriazol-6-yl)-N-[(1R)-1-(2-naphthalenyl)ethyl]- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 21 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2008:829152 CAPLUS

DOCUMENT NUMBER: 149:153073

TITLE: Heterocyclic carboxamide derivatives as calpain

inhibitors and their preparation, pharmaceutical compositions and use in the treatment of diseases

INVENTOR(S): Kling, Andreas; Hornberger, Wilfried; Mack, Helmut;

Moeller, Achim; Nimmrich, Volker; Seemann, Dietmar;

Lubisch, Wilfried

PATENT ASSIGNEE(S): Abbott G.m.b.H. & Co. K.-G., Germany

SOURCE: PCT Int. Appl., 145pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

GΙ

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WO 2007-EP64617
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                        A1 20080710
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                               20080710
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                               20090915
                                           KR 2009-716007
                         Α
                                                                  20071228
     EP 2121653
                               20091125
                                         EP 2007-866322
                                                                  20071228
                         Α1
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     WO 2009083581
                         Α1
                               20090709
                                           WO 2008-EP68313
                                                                  20081229
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             FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE,
             KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,
            ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH,
             PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ,
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             TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
             AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
                                           CN 2007-80051850
     CN 101616908
                         Α
                               20091230
                                                                  20090827
                                                             A 20061229
PRIORITY APPLN. INFO.:
                                           EP 2006-127369
                                           WO 2007-EP64617
                                                              W 20071228
                                                            А
                                           EP 2008-159041
                                                                  20080625
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S):
                       MARPAT 149:153073
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RN

CN

The invention relates to carboxamide derivs. of formula I and their use AB for the manufacture of a medicament. The carboxamide compds. are inhibitors of calpain (calcium dependent cysteine proteases). The invention therefore also relates to the use of these carboxamide compds. for treating a disorder associated with an elevated calpain activity. Compds. of formula I wherein , R1 is H, (un) substituted C1-10 alkyl, (un) substituted C2-10 alkenyl, (un)substituted C2-10 alkynyl, C3-7 (hetero)cycloalkyl, C3-7 (hetero)cycloalkyl-C1-4 alkyl, etc.; R2 is H, (un)substituted C1-10 alkyl, (un) substituted C1-10 alkoxy, (un) substituted C2-10 alkenyl, (un) substituted C2-10 alkynyl, (un) substituted C3-7 (hetero) cycloalkyl, etc.; R3a and R3b are independently OH and C1-4 alkoxy; R3aR3b may taken together with the carbon attached to form C=O; X is H, CO2H and derivs., CONH2 and derivs., CONH-C1-6 alkyl and derivs. and CONH-NH2 and derivs.; Y is a divalent, (un) substituted aromatic or (un) substituted 6-membered heteroarom. radical; Y is a divalent, (un) substituted aromatic or (un) substituted 6-membered heteroarom. radical; W is (un) substituted imidazolyl and (un)substituted pyrazolyl; W and R2 may take together to form (un) substituted heterobi- or heterotricyclic radical; and their tautomers, prodrugs and pharmaceutically suitable salts thereof, are claimed. Example compound II was prepared via amidation of 2-(4-phenyl-1H-imidazol-1-yl)pyridine-3-carboxylic acid with 3-amino-2-hydroxyheptanamide; the resulting N-[1-(2-amino-1-hydroxy-2-oxoethyl)pentyl]-2-(4-phenyl-1H-imidazol-1-imidazyl)pyridine-3-carboxamide underwent oxidation to give II. All the invention compds. were evaluated for their calpain inhibitory activity. From the assay, it was determined that II exhibited the Ki values of \leq 40 nM. 1037827-72-7P, N-[3-Amino-2,3-dioxo-1-(phenylmethyl)propyl]-5-ΙT phenyl-2-(3-phenyl-1H-pyrazol-1-yl)pyridine-3-carboxamide RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of heterocyclic carboxamide derivs. as calpain inhibitors useful in the treatment of diseases)
1037827-72-7 CAPLUS

3-Pyridinecarboxamide, N-[3-amino-2,3-dioxo-1-(phenylmethyl)propyl]-5-phenyl-2-(3-phenyl-1H-pyrazol-1-yl)- (CA INDEX NAME)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

(1 CITINGS)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 21 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2007:964876 CAPLUS

DOCUMENT NUMBER: 147:322852

TITLE: Preparation of substituted pyridinamides as soluble

epoxide hydrolase inhibitors

INVENTOR(S): Eldrup, Anne Bettina; Farrow, Neil Alexander;

Kowalski, Jennifer A.; Delombaert, Stephane; Mugge, Ingo Andreas; Soleymanzadeh, Fariba; Swinamer, Alan

David; Taylor, Steven John

PATENT ASSIGNEE(S): Boehringer Ingelheim International G.m.b.H., Germany;

Boehringer Ingelheim Pharma G.m.b.H. & Co. K.-G.

SOURCE: PCT Int. Appl., 157 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'	TENT	NO.			KINI)	DATE			APPL	ICAT		DATE				
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WO	2007	0983	52		A3		2007	1025									
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		GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KM,	KN,
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							MC,										
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CA	2637	620		·	A1 20070830					CA 2	007-		20070215				
EP	GM, KE, KG, KZ, 2637620 1987004 R: AT, BE,				A2		2008	1105		EP 2	007-	7570	15		2	0070.	215
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		IS,	IT,	LI,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR	
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US	2009	0099	184		A1		2009	0416		US 2	008-	2780	63		2	0800	801
US 20090099184 PRIORITY APPLN. INFO.:								_		US 2	006-	7433	01P]	P 2	0060.	216
		-								WO 2						0070.	
STGNM	ENT H	TSTO	RY F	OR II.	S PA'	rent	AVA	TLARI		-						•	-

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 147:322852

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AB The title compds. I [Ar = (un)substituted Ph or pyridinyl; X, Y = H, halo, CN, etc.] which are compds. active against soluble epoxide hydrolase (sEH), were prepared Thus, reacting 6-(2,2,2-trifluoroethoxy)nicotinic acid with 2,4-dichlorobenzylamine afforded 56% II. Pharmaceutical composition comprising the compound I is claimed.

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ΙT
     947500-35-8P
                      947500-36-9P
                                        947500-47-2P
                                        947500-67-6P
     947500-48-3P
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RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of substituted pyridinamides as soluble epoxide hydrolase inhibitors)

RN 947500-35-8 CAPLUS

CN 3-Pyridinecarboxamide, N-[(2,4-dichlorophenyl)methyl]-5-[4-(trifluoromethoxy)phenyl]- (CA INDEX NAME)

RN 947500-36-9 CAPLUS

CN 3-Pyridinecarboxamide, N-[(2,4-dichlorophenyl)methyl]-5-[3-(trifluoromethoxy)phenyl]- (CA INDEX NAME)

RN 947500-47-2 CAPLUS

CN 3-Pyridinecarboxamide, 5-[4-(trifluoromethoxy)phenyl]-N-[[2-(trifluoromethoxy)phenyl]methyl]- (CA INDEX NAME)

RN 947500-48-3 CAPLUS

CN 3-Pyridinecarboxamide, 5-[3-(trifluoromethoxy)phenyl]-N-[[2-(trifluoromethoxy)phenyl]methyl]- (CA INDEX NAME)

RN 947500-58-5 CAPLUS

CN 3-Pyridinecarboxamide, N-[[2-chloro-4-(methylsulfonyl)phenyl]methyl]-5-[4-(trifluoromethoxy)phenyl]- (CA INDEX NAME)

$$\begin{array}{c|c} C1 & O \\ \hline O & CH_2-NH-C \\ \hline O & \\ \hline O & \\ \hline \end{array}$$

RN 947500-67-6 CAPLUS

CN 3-Pyridinecarboxamide, N-[[4-fluoro-2-(methylsulfonyl)phenyl]methyl]-5-[4-(trifluoromethoxy)phenyl]- (CA INDEX NAME)

RN 947500-78-9 CAPLUS

CN 3-Pyridinecarboxamide, N-[(2-chloro-4-cyanophenyl)methyl]-5-(3-cyanophenyl)- (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & \\ & & \\ & & \\$$

RN 947500-84-7 CAPLUS

CN 3-Pyridinecarboxamide, N-[[2-chloro-4-[(methylamino)sulfonyl]phenyl]methyl]-5-(4-chlorophenyl)- (CA INDEX NAME)

RN 947500-85-8 CAPLUS

CN 3-Pyridinecarboxamide, N-[[2-chloro-4-[(methylamino)sulfonyl]phenyl]methyl]-5-(3-chlorophenyl)- (CA INDEX NAME)

RN 947501-04-4 CAPLUS

CN 3-Pyridinecarboxamide, N-[[2-chloro-4-(methylsulfonyl)phenyl]methyl]-5-(3-chlorophenyl)- (CA INDEX NAME)

$$\begin{array}{c|c} C1 & O \\ \hline O & \\ \hline O & \\ \hline Me-S & \\ \hline O & \\ \hline \end{array}$$

RN 947501-45-3 CAPLUS

CN 3-Pyridinecarboxamide, N-[[4-bromo-2-(trifluoromethoxy)phenyl]methyl]-5-(3-chlorophenyl)- (CA INDEX NAME)

RN 947501-59-9 CAPLUS

CN 3-Pyridinecarboxamide, N-[[4-bromo-2-(trifluoromethoxy)phenyl]methyl]-5-(3-cyanophenyl)- (CA INDEX NAME)

RN 947501-78-2 CAPLUS

CN 3-Pyridinecarboxamide, 5-(3-chlorophenyl)-N-[[4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl]methyl]- (CA INDEX NAME)

RN 947501-83-9 CAPLUS

CN 3-Pyridinecarboxamide, N-[(3-chloro-4'-fluoro[1,1'-biphenyl]-4-yl)methyl]-5-(4-chlorophenyl)- (CA INDEX NAME)

RN 947501-84-0 CAPLUS

CN 3-Pyridinecarboxamide, N-[(3-chloro-4'-fluoro[1,1'-biphenyl]-4-yl)methyl]-5-(3-chlorophenyl)- (CA INDEX NAME)

RN 947501-91-9 CAPLUS

CN 3-Pyridinecarboxamide, N-[(3-chloro-4'-fluoro[1,1'-biphenyl]-4-yl)methyl]-5-(3-cyanophenyl)- (CA INDEX NAME)

RN 947501-92-0 CAPLUS

CN 3-Pyridinecarboxamide, N-[[4-bromo-2-(trifluoromethoxy)phenyl]methyl]-5-(4-

chlorophenyl) - (CA INDEX NAME)

RN 947501-94-2 CAPLUS

CN 3-Pyridinecarboxamide, N-[(2-chloro-4-cyanophenyl)methyl]-5-(4-fluorophenyl)- (CA INDEX NAME)

RN 947501-95-3 CAPLUS

CN 3-Pyridinecarboxamide, N-[(2-chloro-4-cyanophenyl)methyl]-5-(3-fluorophenyl)- (CA INDEX NAME)

RN 947501-96-4 CAPLUS

CN 3-Pyridinecarboxamide, N-[(2-chloro-4-cyanophenyl)methyl]-5-(2-fluorophenyl)- (CA INDEX NAME)

RN 947501-97-5 CAPLUS

CN 3-Pyridinecarboxamide, N-[(2-chloro-4-cyanophenyl)methyl]-5-(2-chlorophenyl)- (CA INDEX NAME)

$$\begin{array}{c|c} C1 & O \\ \hline \\ NC & \\ \end{array}$$

RN 947501-98-6 CAPLUS

CN 3-Pyridinecarboxamide, N-[(2-chloro-4-cyanophenyl)methyl]-5-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 947501-99-7 CAPLUS

CN 3-Pyridinecarboxamide, N-[(2-chloro-4-cyanophenyl)methyl]-5-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 947502-03-6 CAPLUS

CN 3-Pyridinecarboxamide, N-[(2-chloro-4-cyanophenyl)methyl]-5-[4-(ethylthio)phenyl]- (CA INDEX NAME)

RN 947502-08-1 CAPLUS

CN 3-Pyridinecarboxamide, N-[[2-chloro-4-[(methylamino)sulfonyl]phenyl]methyl]-5-(4-fluorophenyl)- (CA INDEX NAME)

RN 947502-09-2 CAPLUS

CN 3-Pyridinecarboxamide, N-[[2-chloro-4-[(methylamino)sulfonyl]phenyl]methyl]-5-(3-fluorophenyl)- (CA INDEX NAME)

RN 947502-10-5 CAPLUS

CN 3-Pyridinecarboxamide, N-[[2-chloro-4-[(methylamino)sulfonyl]phenyl]methyl]-5-(2-chlorophenyl)- (CA INDEX NAME)

$$\begin{array}{c|c} C1 & O \\ O & \\ O & \\ \end{array}$$

$$\begin{array}{c|c} CH_2-NH-C & N \\ \\ O & \\ \end{array}$$

RN 947502-11-6 CAPLUS

CN 3-Pyridinecarboxamide, N-[[2-chloro-4[(methylamino)sulfonyl]phenyl]methyl]-5-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 947502-12-7 CAPLUS

CN 3-Pyridinecarboxamide, N-[[2-chloro-4[(methylamino)sulfonyl]phenyl]methyl]-5-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & \text{C1} & \text{O} \\ & \text{O} & \text{CH}_2 - \text{NH} - \text{C} \\ & \text{N} \\ & \text{O} \\ & \text{CF}_3 \\ \end{array}$$

RN 947502-15-0 CAPLUS

CN 3-Pyridinecarboxamide, N-[[2-chloro-4[(methylamino)sulfonyl]phenyl]methyl]-5-[4-(ethylthio)phenyl]- (CA INDEX NAME)

RN 947502-19-4 CAPLUS

CN 3-Pyridinecarboxamide, N-[[2-chloro-4-(methylsulfonyl)phenyl]methyl]-5-[4-(ethylthio)phenyl]- (CA INDEX NAME)

RN 947502-41-2 CAPLUS

CN 3-Pyridinecarboxamide, N-[[2-chloro-4-[(methylamino)sulfonyl]phenyl]methyl]-5-(2-fluorophenyl)- (CA INDEX NAME)

RN 947502-48-9 CAPLUS

CN 3-Pyridinecarboxamide, N-[[2-chloro-4-(methylsulfonyl)phenyl]methyl]-5-(4-fluorophenyl)- (CA INDEX NAME)

RN 947502-50-3 CAPLUS

CN 3-Pyridinecarboxamide, N-[[2-chloro-4-(methylsulfonyl)phenyl]methyl]-5-(3-fluorophenyl)- (CA INDEX NAME)

$$\begin{array}{c|c} C1 & O \\ \hline O & - CH_2 - NH - C - N \\ \hline Me - S & - CH_2 - NH - C - N \\ \hline O & - CH_2 - NH - C - N \\ \hline O & - CH_2 - NH - C - N \\ \hline O & - CH_2 - NH - C - N \\ \hline O & - CH_2 - NH - C - N \\ \hline O & - CH_2 - NH - C - N \\ \hline O & - CH_2 - NH - C - N \\ \hline O & - CH_2 - NH - C - N \\ \hline O & - CH_2 - NH - C - N \\ \hline O & - CH_2 - NH - C - N \\ \hline O & - CH_2 - NH - C - N \\ \hline O & - CH_2 - NH - C - N \\ \hline O & - CH_2 - NH - C - N \\ \hline O & - CH_2 - NH - C - N \\ \hline O & - CH_2 - N \\ \hline O & -$$

RN 947502-52-5 CAPLUS

CN 3-Pyridinecarboxamide, N-[[2-chloro-4-(methylsulfonyl)phenyl]methyl]-5-(2-fluorophenyl)- (CA INDEX NAME)

RN 947502-53-6 CAPLUS

CN 3-Pyridinecarboxamide, N-[[2-chloro-4-(methylsulfonyl)phenyl]methyl]-5-(2-chlorophenyl)- (CA INDEX NAME)

$$\begin{array}{c|c} & \text{C1} & \text{O} \\ \hline \text{O} & \text{CH}_2 - \text{NH} - \text{C} & \text{N} \\ \hline \text{Me} - \text{S} & \text{C1} \\ \hline \text{O} & \text{C1} \\ \end{array}$$

RN 947502-55-8 CAPLUS

CN 3-Pyridinecarboxamide, N-[[2-chloro-4-(methylsulfonyl)phenyl]methyl]-5-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

$$\begin{array}{c|c} C1 & O \\ \hline O & \\ Me-S \\ \hline O \\ \end{array}$$

RN 947502-57-0 CAPLUS

CN 3-Pyridinecarboxamide, N-[[2-chloro-4-(methylsulfonyl)phenyl]methyl]-5-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

$$\begin{array}{c|c} C1 & O \\ \hline O & \\ \hline O & \\ \hline Me-S & \\ \hline O & \\ \hline \end{array}$$

RN 947502-67-2 CAPLUS

CN 3-Pyridinecarboxamide, 5-(4-fluorophenyl)-N-[[4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl]methyl]- (CA INDEX NAME)

RN 947502-69-4 CAPLUS

CN 3-Pyridinecarboxamide, 5-(3-fluorophenyl)-N-[[4'-(methylsulfonyl)]1,1'-biphenyl]-4-yl]methyl]- (CA INDEX NAME)

RN 947502-71-8 CAPLUS

CN 3-Pyridinecarboxamide, 5-(2-fluorophenyl)-N-[[4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl]methyl]- (CA INDEX NAME)

$$\begin{array}{c|c} O & O & O \\ \hline \\ O & O & \\ \hline \\ O & \\ \end{array}$$

RN 947502-72-9 CAPLUS

CN 3-Pyridinecarboxamide, N-[[4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl]methyl]- 5-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

$$\begin{array}{c|c} O & O & O \\ \hline Me-S & O & O \\ \hline O & CH_2-NH-C & N \\ \hline \end{array}$$

RN 947502-75-2 CAPLUS

CN 3-Pyridinecarboxamide, N-[(3-chloro-4'-fluoro[1,1'-biphenyl]-4-yl)methyl]-5-(4-fluorophenyl)- (CA INDEX NAME)

RN 947502-76-3 CAPLUS

CN 3-Pyridinecarboxamide, N-[(3-chloro-4'-fluoro[1,1'-biphenyl]-4-yl)methyl]-5-(3-fluorophenyl)- (CA INDEX NAME)

RN 947502-77-4 CAPLUS

CN 3-Pyridinecarboxamide, N-[(3-chloro-4'-fluoro[1,1'-biphenyl]-4-yl)methyl]-5-(2-fluorophenyl)- (CA INDEX NAME)

RN 947502-78-5 CAPLUS

CN 3-Pyridinecarboxamide, N-[(3-chloro-4'-fluoro[1,1'-biphenyl]-4-yl)methyl]-5-(2-chlorophenyl)- (CA INDEX NAME)

RN 947502-79-6 CAPLUS

CN 3-Pyridinecarboxamide, N-[(3-chloro-4'-fluoro[1,1'-biphenyl]-4-yl)methyl]-5-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 947502-80-9 CAPLUS

CN 3-Pyridinecarboxamide, N-[(3-chloro-4'-fluoro[1,1'-biphenyl]-4-yl)methyl]- 5-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 947502-86-5 CAPLUS

CN 3-Pyridinecarboxamide, N-[[4-bromo-2-(trifluoromethoxy)phenyl]methyl]-5-(4-fluorophenyl)- (CA INDEX NAME)

RN 947502-87-6 CAPLUS

CN 3-Pyridinecarboxamide, N-[[4-bromo-2-(trifluoromethoxy)phenyl]methyl]-5-(3-fluorophenyl)- (CA INDEX NAME)

RN 947502-88-7 CAPLUS

CN 3-Pyridinecarboxamide, N-[[4-bromo-2-(trifluoromethoxy)phenyl]methyl]-5-(2-fluorophenyl)- (CA INDEX NAME)

RN 947502-89-8 CAPLUS

CN 3-Pyridinecarboxamide, N-[[4-bromo-2-(trifluoromethoxy)phenyl]methyl]-5-(2-chlorophenyl)- (CA INDEX NAME)

RN 947502-90-1 CAPLUS

CN 3-Pyridinecarboxamide, N-[[4-bromo-2-(trifluoromethoxy)phenyl]methyl]-5-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 947502-93-4 CAPLUS

CN 3-Pyridinecarboxamide, N-[[4-bromo-2-(trifluoromethoxy)phenyl]methyl]-5-[4-(ethylthio)phenyl]- (CA INDEX NAME)

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L4 ANSWER 6 OF 21 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2007:905857 CAPLUS

DOCUMENT NUMBER: 147:277452

TITLE: Anthranilamide/2-amino-heteroarenecarboxamide

derivatives as CETP inhibitors and their preparation Conte, Aurelia; Kuehne, Holger; Luebbers, Thomas;

INVENTOR(S): Conte, Aurelia; Kuehne, Holger; Luebbers, Thomas;

Mattei, Patrizio; Maugeais, Cyrille; Mueller, Werner;

Pflieger, Philippe

PATENT ASSIGNEE(S): F. Hoffmann-La Roche A.-G., Switz.

SOURCE: PCT Int. Appl., 103pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE				
WO 2007090752	A1 20070816	WO 2007-EP50815	20070129				
W: AE, AG, AL,	AM, AT, AU, AZ,	BA, BB, BG, BR, BW, BY,	BZ, CA, CH,				
CN, CO, CR,	CU, CZ, DE, DK,	DM, DZ, EC, EE, EG, ES,	FI, GB, GD,				
GE, GH, GM,	GT, HN, HR, HU,	ID, IL, IN, IS, JP, KE,	KG, KM, KN,				
KP, KR, KZ,	LA, LC, LK, LR,	LS, LT, LU, LV, LY, MA,	MD, MG, MK,				
MN, MW, MX,	MY, MZ, NA, NG,	NI, NO, NZ, OM, PG, PH,	PL, PT, RO,				
RS, RU, SC,	SD, SE, SG, SK,	SL, SM, SV, SY, TJ, TM,	TN, TR, TT,				
, , ,	US, UZ, VC, VN,	•					
		DK, EE, ES, FI, FR, GB,					
		PL, PT, RO, SE, SI, SK,					
·		GW, ML, MR, NE, SN, TD,	· · · · · ·				
, , , ,	· · · · · · · · · · · · · · · · · · ·	SL, SZ, TZ, UG, ZM, ZW,	AM, AZ, BY,				
KG, KZ, MD,	· ·		00000000				
US 20070219261							
AU 2007213835		AU 2007-213835	20070129				
CA 2637771		CA 2007-2637771	_ 0 0 . 0 0				
EP 1984340		EP 2007-726239					
		DK, EE, ES, FI, FR, GB,	· · · · · · · · · · · · · · · · · · ·				
ло, пл, шл, JP 2009526008		NL, PL, PT, RO, SE, SI, JP 2008-553714					
	A 20080811						
	A 20090313	IN 2008-CN4117					
	A 20090313 A 20080917						
CN 101379036							

PRIORITY APPLN. INFO.:

EP 2006-101366 A 20060207 WO 2007-EP50815 W 20070129

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 147:277452

GΙ

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Compds. of formula I processes for their preparation, their use as pharmaceuticals and to pharmaceutical compns. comprising them. Compds. of formula I wherein R1, R2, R4 and R5 are independently H, C1-6 alkyl, C1-6 alkoxy and halo; R3 is C1-6 (halo)alkyl, C3-6 cycloalkyl, Si(C1-6 alkyl)3, etc.; R2R3 taken together to form a 5- to 6-membered carbocycle and 5- to 6-membered heterocycle; R6 is H and c1-6 alkyl; R7 and R8 are independently H, C1-6 alkyl, OH and halo; R9 is H, C1-6 (halo)alkyl, C2-6 alkenyl, heterocyclyl, heteroaryl, etc.; R10 and R11 are independently H, halo, C1-6 alkyl, and acyl; A and B are independently N, CH, C-halo, C-C1-6 alkyl, C-C1-6 alkoxy, and C-C2-6 alkenyl; D is N, CH, C-halo, C-C1-6 alkyl, C-C1-6 alkoxy, C-C2-6 alkenyl and phenyl; E is N, CH, C-halo, C-C1-6 alkyl, C-C1-6 alkoxy, and C-C2-6 alkenyl, etc.; and their pharmaceutically acceptable salts thereof, are claimed. Example compound II was prepared by amidation of 5-chloro-2-isopropylaminobenzoic acid with (4-cyclopentylbenzyl)-[2-(3-trifluoromethylphenyl)ethyl]amine. All the invention compds. were evaluated for their CETP inhibitory activity (some data given).

IT 946116-22-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of anthranilamide and aminoheteroarenecarboxamide derivs. as CETP inhibitors)

RN 946116-22-9 CAPLUS

CN 3-Pyridinecarboxamide, N-[2-(3,4-dichlorophenyl)ethyl]-N-[[4-(1,1-dimethylethyl)phenyl]methyl]-2-(methylamino)-5-phenyl- (CA INDEX NAME)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

(1 CITINGS)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 21 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2007:83548 CAPLUS

DOCUMENT NUMBER: 146:184364

TITLE: Preparation of nicotinamides as inhibitors of mitotic

kinesin

INVENTOR(S): Pinkerton, Anthony B.; David, Robert L.

PATENT ASSIGNEE(S): Kalypsys, Inc., USA SOURCE: PCT Int. Appl., 50 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'	TENT 1	NO.			KIN	D	DATE			APPL	ICAT	ION I	NO.			ATE		
					A2 A3		2007 2007		,	WO 2	006-	JS27	450			0060		
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
		GE,	GH,	GM,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KM,	KN,	KP,	
		KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	
		MW,	MX,	MZ,	NA,	NG,	ΝI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RS,	RU,	
		SC,	SD,	SE,	SG,	SK,	SL,	SM,	SY,	ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	
		US,	UZ,	VC,	VN,	ZA,	ZM,	ZW										
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	
		IS,	ΙT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	
		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG,	BW,	GH,	
		GM,	ΚE,	LS,	MW,	MΖ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,	
		KG,	KΖ,	MD,	RU,	ΤJ,	TM,	AP,	EA,	EP,	OA							
PRIORIT	W: AE, AG, CN, CO, GE, GH, KR, KZ, MW, MX, SC, SD, US, UZ, RW: AT, BE, IS, IT, CF, CG, GM, KE, KG, KZ, PRIORITY APPLN. INFO			.:						US 2	005-	6995.	23P	P 20050715				
OTHER SOURCE(S): GI					MARPAT 146:184364													

AB The title compds. I [R1, R2 = H, alkyl, alkoxyalkyl, etc.; or NR1R2 = (un)substituted heterocycloalkyl; R3-R7 = H, carboxy, alkoxycarbonyl, etc.; X = 0 or S; Q1, Q2 = CR7 and N (with the proviso that only one of Q1 and Q2 = CR7); Q3-Q7 = CR7 and N], useful as inhibitors of KSP for the treatment or prevention of cellular proliferative diseases, were prepared E.g., a 2-step synthesis of II, starting from 5-bromonicotinic acid and

1-benzylpiperidin-4-ylamine, was given. Exemplified compds. I were tested in in vitro KSP ATP depletion assay. For example, II showed IC50 of $\leq\!20~\mu\text{M}$ in that assay. Pharmaceutical composition comprising the compound I as well as a method of treatment of a KSP-mediated disease comprising the administration of compound I in combination with another therapeutic agents are disclosed.

 IT
 1057089-58-3
 1057089-65-2
 1057089-66-3

 1057089-67-4
 1057089-68-5
 1057089-69-6

 1057089-79-8
 1057089-80-1
 1057089-83-4

1057089-84-5

RL: PRPH (Prophetic)

(Preparation of nicotinamides as inhibitors of mitotic kinesin)

RN 1057089-58-3 CAPLUS

CN 3-Pyridinecarboxamide, N-[(2-methoxyphenyl)methyl]-5-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 1057089-65-2 CAPLUS

CN 3-Pyridinecarboxamide, 5-[3-(1,1-dimethylethyl)phenyl]-N-[(2-methoxyphenyl)methyl]- (CA INDEX NAME)

RN 1057089-66-3 CAPLUS

CN 3-Pyridinecarboxamide, 5-(2,5-difluorophenyl)-N-[(2-methoxyphenyl)methyl]-(CA INDEX NAME)

RN 1057089-67-4 CAPLUS

CN 3-Pyridinecarboxamide, 5-(4-fluorophenyl)-N-[(2-methoxyphenyl)methyl]- (CA INDEX NAME)

RN 1057089-68-5 CAPLUS

CN 3-Pyridinecarboxamide, 5-(4-chlorophenyl)-N-[(2-methoxyphenyl)methyl]-(CA INDEX NAME)

RN 1057089-69-6 CAPLUS

CN 3-Pyridinecarboxamide, N-[(2-methoxyphenyl)methyl]-5-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 1057089-79-8 CAPLUS

CN 3-Pyridinecarboxamide, N-[(2,5-difluorophenyl)methyl]-5-[4-(1,1-dimethylethyl)phenyl]- (CA INDEX NAME)

RN 1057089-80-1 CAPLUS

CN 3-Pyridinecarboxamide, N-[(2,5-difluorophenyl)methyl]-5-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 1057089-83-4 CAPLUS

CN 3-Pyridinecarboxamide, N-[(2,5-difluorophenyl)methyl]-5-[3-(1,1-dimethylethyl)phenyl]- (CA INDEX NAME)

RN 1057089-84-5 CAPLUS

CN 3-Pyridinecarboxamide, N-[(2,5-difluorophenyl)methyl]-5-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

$$\begin{array}{c|c} F & O \\ \hline \\ CH_2-NH-C & N \\ \hline \\ CF_3 \end{array}$$

IT 921612-14-8P 921612-25-1P 921612-28-4P

921612-34-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of nicotinamides as inhibitors of mitotic kinesin useful in treatment and prevention of proliferative diseases)

RN 921612-14-8 CAPLUS

CN 3-Pyridinecarboxamide, 5-[4-(1,1-dimethylethyl)phenyl]-N-[(4-methoxyphenyl)methyl]- (CA INDEX NAME)

RN 921612-25-1 CAPLUS

CN 3-Pyridinecarboxamide, 5-[4-(1,1-dimethylethyl)phenyl]-N-(1-phenylethyl)-(CA INDEX NAME)

RN 921612-28-4 CAPLUS

CN 3-Pyridinecarboxamide, 5-[4-(1,1-dimethylethyl)phenyl]-N-[(2-methoxyphenyl)methyl]- (CA INDEX NAME)

RN 921612-34-2 CAPLUS

CN 3-Pyridinecarboxamide, N-[2-(3,4-dimethoxyphenyl)ethyl]-5-[4-(1,1-dimethylethyl)phenyl]- (CA INDEX NAME)

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L4 ANSWER 8 OF 21 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2006:844724 CAPLUS

DOCUMENT NUMBER: 145:271808

TITLE: Pyridyl and phenyl substituted piperazine-piperidines

with CXCR3 antagonist activity and their preparation, pharmaceutical compositions and their use in the

treatment of chemokine mediated diseases

INVENTOR(S): Mcguinness, Brian F.; Rosenblum, Stuart B.; Kozlowski,

Joseph A.; Anilkumar, Gopinadhan N.; Kim, Seong Heon; Shih, Neng-Yang; Jenh, Chung-Her; Zavodny, Paul J.; Hobbs, Douglas W.; Dong, Guizhen; Shao, Yuefei; Zawacki, Lisa Guise; Yang, Cangming; Carroll, Carolyn Dilanni

PATENT ASSIGNEE(S): Schering Corporation, USA; Pharmacopeia Drug

Discovery, Inc.

SOURCE: PCT Int. Appl., 242 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA:	TENT I	. O <i>V</i> .			KIND DATE				i	APP	LICAT		DATE				
	2006								Ī	WO	2006-		20060214				
	₩:	CN, GE, KZ, MZ, SG,	CO, GH, LC, NA, SK,	CR, GM, LK, NG, SL,	CU, HR, LR, NI, SM,	CZ, HU, LS, NO, SY,	DE, ID, LT, NZ,	DK, IL, LU, OM,	DM, IN, LV, PG,	DZ IS LY PH	, BG, , EC, , JP, , MA, , PL, , TT,	EE, KE, MD, PT,	EG, KG, MG, RO,	ES, KM, MK, RU,	FI, KN, MN, SC,	GB, KP, MW, SD,	GD, KR, MX, SE,
	R₩:	AT, IS, CF, GM,	BE, IT, CG, KE,	LT, CI,	CH, LU, CM, MW,	CY, LV, GA, MZ,	MC, GN, NA,	NL, GQ,	PL, GW,	PT ML	, ES, , RO, , MR, , TZ,	SE, NE,	SI, SN,	SK, TD,	TR, TG,	BF, BW,	BJ, GH,
IΙΔ	2006	,	,	,	,	,		0824		ΔII	2006-	2143	78		2	0060	214
											2006-						
											2006-						
	1856										2006-						
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		IS,	IT,	•	LT,	•	•	,			, PT,		•	•		•	•
.TP	2008						2008	0807	JP 2007-556253						2	0060	214
	2007		-							_						0070	
	2007						2008		MX 2007-9946 ZA 2007-6793							0070	-
	2007						2007				2007-					0070	
	1012	-					2008				2006-					0071	-
IORIT								0,02			2005-						
				• •							2006-i					0060	
SIGNME	ENT H	ISTO	RY F	OR U	S PA'	TENT	AVA	ILABI									

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): CASREACT 145:271808; MARPAT 145:271808

^{*} STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The present application discloses a compound, or enantiomers, stereoisomers, rotamers, tautomers, racemates or prodrug of said compound, or pharmaceutically acceptable salts, solvates or esters of said compound, or of said prodrug, said compound having the general structure shown in Formula 1: and the pharmaceutically acceptable salts, solvates and esters thereof. Also disclosed is a method of treating chemokine mediated diseases, such as, palliative therapy, curative therapy, prophylactic therapy of certain

diseases and conditions such as inflammatory diseases (non limiting example(s) include, psoriasis), autoimmune diseases (non limiting example(s) include, rheumatoid arthritis, multiple sclerosis), graft rejection (non limiting example(s) include, allograft rejection, xenograft rejection), infectious diseases (e.g., tuberculoid leprosy), fixed drug eruptions, cutaneous delayed-type hypersensitivity responses, ophthalmic inflammation, type I diabetes, viral meningitis and tumors using a compound of Formula 1. The present application discloses a compound, or enantiomers, stereoisomers, rotamers, tautomers, racemates or prodrug of said compound, or pharmaceutically acceptable salts, solvates or esters of said compound, or of said prodrug, said compound having the general structure shown in formula I. Compds. of formula I wherein Z is N, CR29, NO, or NOH; X is N, O, alkyl, cycloalkyl, heteroaryl, heterocyclyl or heterocyclenyl; R1 and R2 are independently absent, or H, alkyl, alkoxy, alkenyl, carbonyl, cycloalkyl, cycloalkenyl, alkylaryl, arylalkyl, aryl, amino, alkylamino, amidinyl, carboxamido, CN, OH, urea, etc.; R3, R4, R6, R29 are independently H , alkyl, alkylaryl, aralkyl, CN, CF3, haloalkyl, cycloalkyl, halo, hydroxyalkyl, etc.; R7 and R8 are independently H, alkyl, alkylaryl, heteroaryl, OH, CN, alkoxy, alkylamino, NHSO2 alkyl, NHCONH alkyl, or R7R8 taken together is O, S, NH, N(alkyl), N(O alkyl), NOH, or cycloalkyl; R10 is H, alkyl, cycloalkyl, (hetero)aryl, heterocyclenyl, heterocyclyl, alkylaryl, arylalkyl, CO2H, hydroxyalkyl, etc.; R11 is H, alkyl, cycloalkyl, (hetero)aryl, heterocyclyl, heterocyclenyl, alkylaryl, arylalkyl, hydroxyalkyl, carboxamide, CO2H, etc.; R12 is H, alkyl, CN, CONH2 and derivs., C1-5 alkyl-OH, alkyl ether, etc.; D is 5- to 9-membered cycloalkyl, cycloalkenyl, (hetero)aryl, heterocyclenyl, or heterocyclyl; Y is (un)substituted alkyl, (un) substituted alkyl carbonyl, (un) substituted alkoxy, carbonyl, C-NH and derivs., etc.; m and n are independently 1 to 4; and their pharmaceutically acceptable salts, solvates and esters are claimed. Also disclosed is a method of treating chemokine mediated diseases, such as, palliative therapy, curative therapy, prophylactic therapy of certain diseases and conditions such as inflammatory diseases (non limiting example(s) include, psoriasis), autoimmune diseases (non limiting example(s) include, rheumatoid arthritis, multiple sclerosis), graft rejection (non limiting example(s) include, allograft rejection, xenograft rejection), infectious diseases (e.g., tuberculoid leprosy), fixed drug eruptions, cutaneous delayed-type hypersensitivity responses, ophthalmic inflammation, type I diabetes, viral meningitis and tumors using a compound of formula I. Example compound II was prepared by amidation of 5,6-dichloronicotinic acid with ethylamine; the resulting amide underwent amination with 1-Boc-2(S)-ethyl-5(R)-methylpiperazine to give the6-piperazinylnicotinamide derivative, which underwent hydrolysis followed by reductive amination with 1-(4-chlorobenzyl)-4-piperidinone to give compound II. All the invention compds. were evaluated for their CXCR3 antagonistic activity. From the assay it was determined that most of the tested compds. exhibited CXCR3 antagonistic activity. Compound II exhibited an IC50 value of less than 25 nM, and compound II exhibited an IC50 value of 0.2 nM. 906559-64-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of pyridyl and Ph substituted piperazine-piperidines with CXCR3 antagonist activity useful in treatment of diseases)

RN 906559-64-6 CAPLUS

ΙT

CN 3-Pyridinecarboxamide, N-[(4-chlorophenyl)methyl]-6-[4-[1-[(4-chlorophenyl)methyl]-4-piperidinyl]-1-piperazinyl]-5-phenyl- (CA INDEX NAME)

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L4 ANSWER 9 OF 21 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2006:608560 CAPLUS

DOCUMENT NUMBER: 145:83228

TITLE: Preparation of pyrid-2-ones useful as inhibitors of

Tec family protein kinases for the treatment of

inflammatory, proliferative and immunologically-mediated diseases

INVENTOR(S): Charrier, Jean-Damien; Durrant, Steven; Ramaya, Sharn;

Jimenez, Juan-Miguel; Rutherford, Alistair

PATENT ASSIGNEE(S): Vertex Pharmaceuticals Incorporated, USA

SOURCE: PCT Int. Appl., 130 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA:	TENT	NO.			KIN	D	DATE			APPL	ICAT	ION 1	NO.		D	ATE	
WO	2006	0659	 46		A1		2006	0622	,	WO 2	005-	US45.	 336		2	0051	215
	W:		•	•	•		AU, DE,	•		•		•	•		•	•	,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KN,	KP,	KR,
		KΖ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,	MX,
		${ m MZ}$,	NA,	NG,	NΙ,	NO,	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,
							ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,
			YU,	,	,												
	RW:	ΑT,															,
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		•	•	•	•		NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AΖ,	BY,
7\ T T	2005		ΚΖ,					0622		7.11.7	005	2165	4.0		2	0051	215
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	1831											8541					
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JP	2008						2008	0710		JP 2	007-	5468	78		2	0051	215
ZA	2007	0049	71		Α		2008	0925		ZA 2	007-	4971			2	0051	215
MX	2007	0073	30		Α		2007	1004]	MX 2	007-	7330			2	0070	618
ΙN	2007	KN02	260		Α		2007	0817		IN 2	007-	KN22	60		2	0070	619
	2007				Α		2007	0716				3628				0070	
	2007		-		А		2007						716337			716	
	1011		-		А		2008					8004			_	0070	
JP	2009	0623	91		А		2009	0326	ı	JP 2	008-	2871	71		2	0081	107

PRIORITY APPLN. INFO.:

US 2004-636754P P 20041216 US 2005-673870P P 20050422 JP 2007-546878 A3 20051215 WO 2005-US45336 W 20051215

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): CASREACT 145:83228; MARPAT 145:83228 GI

$$R^{3}$$
 R^{2}
 R^{4}
 R^{1}
 X^{2}
 X^{1}
 X^{2}
 X^{2}
 X^{3}
 X^{4}
 X^{2}
 X^{1}
 X^{2}
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 X^{4}
 X^{5}
 X^{5

The title compds. I [R3, R4 = H, halo or alkyl optionally substituted withAB halo, alkyl, OCH3, NO2, NH2, CN, NHCH3, SCH3, or N(CH)2; R2 = 3-8 membered saturated, partially unsatd., or fully unsatd. monocyclic ring having 0-3heteroatoms independently selected from N, O, or S, or 8-12 membered saturated, partially unsatd., or fully unsatd. bicyclic ring system having 0-5 heteroatoms independently selected from N, O, or S; X1, X2 = C(O), NR, or SO2 (wherein one of X1 or X2 = NR and other of X1 or X2 = C(0) or SO2); R1 = TQ (T = a bond or alkylene wherein up tp 3 methylene units are optionally replaced by O, S, CS, etc.; Q = H, alkyl, 3-8 membered saturated, partially unsatd., or fully unsatd. monocyclic ring having 0-3 heteroatoms independently selected from N, O, or S, or 8-12 membered saturated, partially unsatd., or fully unsatd. bicyclic ring system having 0-5 heteroatoms independently selected from N, O, or S)] which are effective as inhibitors of Tec family (e.g., Tec, Btk, Itk/Emt/Tsk, Bmx, Txk/Rlk) protein kinases, were prepared Thus, reacting amrinone with 4-tert-butylbenzoyl chloride afforded 9% II which showed Ki between 0.1 μM and 1 μM against ITK. The compds. I and their pharmaceutically acceptable compns. are useful for treating or preventing a variety of diseases, disorders or conditions, including, but not limited to, an autoimmune, inflammatory, proliferative, or hyperproliferative disease or an immunol.-mediated disease. 893439-39-9P 893439-63-9P 893439-99-1P ΤТ

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of pyridones as inhibitors of Tec family protein kinases useful for treating and preventing inflammatory, proliferative, hyperproliferative, autoimmune or immunol.—mediated disease)

RN 893439-39-9 CAPLUS

CN 3-Pyridinecarboxamide, 1,2-dihydro-2-oxo-5-phenyl-N-(phenylmethyl)- (CA INDEX NAME)

RN 893439-63-9 CAPLUS

CN 3-Pyridinecarboxamide, 1,2-dihydro-N-[(2-methoxyphenyl)methyl]-2-oxo-5-phenyl- (CA INDEX NAME)

RN 893439-99-1 CAPLUS

CN 3-Pyridinecarboxamide, 1,2-dihydro-N-(2-hydroxy-2-phenylethyl)-2-oxo-5-phenyl- (CA INDEX NAME)

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD

(5 CITINGS)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 10 OF 21 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2005:141021 CAPLUS

DOCUMENT NUMBER: 142:261788

TITLE: Preparation of aryl and heteroaryl amino acid

derivatives as antagonists of factor IX and/or factor

ΧI

INVENTOR(S): Mjalli, Adnan M. M.; Andrews, Robert C.; Guo,

Xiao-Chuan; Christen, Daniel Peter; Gohimmukkula, Devi

Reddy; Huang, Guoxiang; Rothlein, Robert; Tyagi, Sameer; Yaramasu, Tripura; Behme, Christopher Transtech Pharma, Inc., USA

PATENT ASSIGNEE(S): Transtech Pharma, Inc., USA SOURCE: PCT Int. Appl., 313 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 6

PATENT INFORMATION:

					KIND DATE				APPL				DATE					
WO	2005	0145	33		A2 20050217 A3 20050407									20040806				
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	VV •							DK,	•	•								
								IL,										
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								UA,										
	DM.							MZ,										
	IVW •							TJ,										
						•		HU,	•	•								
								CG,										
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ΑIJ	2004	,	,		A1		2005	0217		AU 2	004-	2635	20040806					
CA	2531	796			A1 20050217 AU 2004-2635 A1 20050217 CA 2004-2531							796	20040806					
	2005																	
IIS	7501	538			B2		2009	0310										
US	2005	0059	713		A1		2005	0317		US 2	004-	9132	20040806					
US	7459	472			В2		2008	1202										
EP	1660	439			A2		2006	0531		EP 2	004-	7803		20040806				
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
								MK,										H
CN	1832 2007	920			Α		2006	0913		CN 2	004-	8002	2750		2	0040	806	
JP	2007	5018	44		Τ		2007	0201		JP 2	006-	5232	45		2	0040	806	
ΙN	2006	KN00	514		Α		2008	1205		IN 2	006-	KN51	4		2	0060	306	
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										US 2	003-	4938	79P		P 2	0030	808	
										US 2	003-	4939	03P		P 2	0030	808	
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): CASREACT 142:261788; MARPAT 142:261788

The invention relates to aryl and heteroaryl compds. Ar2-K [Ar2 is (un) substituted aryl, heteroaryl, fused cycloalkylaryl, fused cycloalkylheteroaryl, fused heterocyclylaryl or fused heterocyclylheteroaryl; K is a carbamoyl group of defined structure or Ar1-V-CH[(CH2)0-2-G]-X-, where G is H, CO2R1, CH2OR1, COR1, CR1:NOR2, CONR1R2, CONHNH2 or an acid or ester isostere and R1, R2 independently are H, alkyl, alkoxy, aryl, alkylaminoacyl, etc. or may combine to form a ring; V is (CH2)1-2-S-(CH2)0-2, (CH2)1-2-S, S-(CH2)0-2 (or corresponding sulfonyl derivs.), (CH2)1-2-O-(CH2)0-2, (CH2)1-2-NR7-(CH2)0-2, (CH2)1-2-Oor a direct bond, where R7 is H, alkyl, aryl, etc. (the CH2 or CH2CH2 groups may be substituted); X is NR8, CONR8, NR8CO, NR8CONR9, O2CNR8, SO2NR8 or NR8SO2NR9, where R8, R9 are independently H, alkyl, aryl, etc.; Ar1 is a group as defined for Ar2] and their pharmaceutical compns. Compds. Ar2-K may be antagonists or partial antagonist of factor IX and/or factor XI and thus may be useful for inhibiting the intrinsic pathway of blood coagulation. Applications include the management, treatment and/or control of diseases caused in part by the intrinsic clotting pathway. Thus, (25)-[5-bromo-2-(4-trifluoromethylbenzyloxy)benzoylamino]-3-(2'phenoxybiphenyl-4-yl)propionic acid, prepared by amidation and O-benzylation reactions, inhibited factor IX or factor XI in the in vitro clotting assay with IC50 < 30 micromolar.

IT 845677-64-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU

(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of aryl and heteroaryl amino acid derivs. as antagonists of factor ${\tt IX}$ and/or factor ${\tt XI}$)

RN 845677-64-7 CAPLUS

CN [1,1'-Biphenyl]-4-propanoic acid, 3'-chloro-4'-fluoro- α -[[[5-[4-(trifluoromethyl)phenyl]-3-pyridinyl]carbonyl]amino]-, methyl ester, (α R)- (CA INDEX NAME)

Absolute stereochemistry.

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L4 ANSWER 11 OF 21 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2005:607 CAPLUS

DOCUMENT NUMBER: 142:93690

TITLE: Preparation of diphenylpyridine derivatives as

antagonists of CB1 cannabinoid receptors and their

therapeutic application

INVENTOR(S): Barth, Francis; Hortala, Laurent; Rinaldi, Carmona

Murielle

PATENT ASSIGNEE(S): Sanofi-Synthelabo, Fr. SOURCE: Fr. Demande, 31 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2856684	A1	20041231	FR 2003-7757	20030626
FR 2856684	B1	20080411		
AU 2004251914	A1	20050106	AU 2004-251914	20040624
CA 2528619	A1	20050106	CA 2004-2528619	20040624
WO 2005000817	A2	20050106	WO 2004-FR1581	20040624
WO 2005000817	A3	20050317		
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W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,

GΙ

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CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
            AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
             SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
             SN, TD, TG
     EP 1641758
                         A2
                                20060405
                                            EP 2004-767437
                                                                   20040624
     EP 1641758
                         В1
                                20081029
           AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR
                               20060808
                                           BR 2004-11762
     BR 2004011762
                         Α
                                                                   20040624
     CN 1832945
                                20060913
                                            CN 2004-80022485
                                                                   20040624
                         Α
     JP 2007514638
                          Τ
                                20070607
                                            JP 2006-516318
                                                                   20040624
     AT 412635
                         Τ
                                20081115
                                            AT 2004-767437
                                                                   20040624
    MX 2005014222
                         Α
                                20060313
                                            MX 2005-14222
                                                                   20051221
     US 20060189664
                         Α1
                                20060824
                                            US 2005-316510
                                                                   20051222
     US 7345059
                         В2
                                20080318
     IN 2005KN02712
                         Α
                                20061201
                                            IN 2005-KN2712
                                                                   20051226
PRIORITY APPLN. INFO.:
                                            FR 2003-7757
                                                                  20030626
                                                                Α
                                            WO 2004-FR1581
                                                                   20040624
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S):
                        MARPAT 142:93690
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* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AΒ Title compds. I [wherein R1 = H, alkyl; R2 = alkyl, NH-alkyl and derivs., (un) substituted indan-1-yl, 1,2,3,4-tetrahydronaphthalen-1-yl, saturated mononitrogen- or monooxygen-containing heterocyclyl, etc.; or R1NR2 = mono- or disubstituted piperazin-1-yl in 4-position; R3, R4, R5, R6, R7, R8 = independently H, halo, alkyl, alkoxy, CF3; R9 = H, alkyl, CN, CH2OH, CH2O-alkyl; their free bases or acid addition salts, and their hydrates or solvates] were prepared as antagonists of CB1 cannabinoid receptors and for treatment of the diseases it implies. For instance, II (m.p. = 185°) was prepared by treating 5-(2,4-dichlorophenyl)-6-(4-chlorophenyl)-2-methylpyridine-3-carboxylic acid (preparation given) with SOC12 at reflux for 2 h, followed by TEA-amidation with tert-butylamine in DCM. I exhibited an excellent affinity in vitro (IC50 \leq 10-7 M) for the CB1 cannabinoid receptors. Thus, I are useful for treating psychosis, appetite and gastrointestinal disorders, smoking and alc. cessation, etc. 817553-38-1P 817553-44-9P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (CB1 cannabinoid; preparation of diphenylpyridine derivs. as antagonists of

RN 817553-38-1 CAPLUS

CB1 cannabinoid receptors)

CN 3-Pyridinecarboxamide, 6-(4-chlorophenyl)-5-(2,4-dichlorophenyl)-2-methyl-N-(2-phenylethyl)- (CA INDEX NAME)

$$\begin{array}{c|c} \text{C1} & \\ \text{C1} & \\ \text{N} & \\ \text{C} & \text{NH- CH}_2\text{- CH}_2\text{- Ph} \\ \\ \text{O} & \\ \end{array}$$

RN 817553-44-9 CAPLUS

CN 3-Pyridinecarboxamide, 6-(4-chlorophenyl)-5-(2,4-dichlorophenyl)-2-methyl-N-(3-phenylpropyl)- (CA INDEX NAME)

OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD

(8 CITINGS)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 12 OF 21 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2004:1156027 CAPLUS

DOCUMENT NUMBER: 142:219126

TITLE: Suzuki coupling reaction for the solid-phase

preparation of 5-substituted nicotinic acid

derivatives

AUTHOR(S): Fernandez, Joan-Carles; Sole-Feu, Laia;

Fernandez-Forner, Dolors; de la Figuera, Natalia;

Forns, Pilar; Albericio, Fernando

CORPORATE SOURCE: Almirall Prodesfarma-Barcelona Science Park Unit,

Barcelona, 08028, Spain

SOURCE: Tetrahedron Letters (2005), 46(4), 581-585

CODEN: TELEAY; ISSN: 0040-4039

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 142:219126

GΙ

Wang resin support
$$-0$$
 $\stackrel{\text{Ph}}{\underset{\text{N}}{\bigvee}}$ $\stackrel{\text{O}}{\underset{\text{N}}{\bigvee}}$ $\stackrel{\text{Br}}{\underset{\text{N}}{\bigvee}}$

AB The application of the Suzuki coupling reaction to the preparation of small combinatorial libraries using 5-(bromo)nicotinic acid as a scaffold onto three different types of solid support (Wang, Rink, and BAL resin) is described. For example, the Suzuki coupling of Wang resin-bound N-[(5-bromo-3-pyridinyl)carbonyl]-L-phenylalanine (I) with (4-fluorophenyl)boronic acid gave N-[[5-(4-fluorophenyl)-3-pyridinyl]carbonyl]-L-phenylalanine (II), after cleavage from the supporting resin.

Ι

IT 842170-46-1P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of N-[(phenyl)pyridinyl]carbonyl]phenylalanine by Suzuki coupling using Wang resin-bound N-[[(bromo)pyridinyl]carbonyl]phenylalanine and [(fluoro)phenyl]boronic acid derivative as starting materials)

RN 842170-46-1 CAPLUS

CN L-Phenylalanine, N-[[5-(4-fluorophenyl)-3-pyridinyl]carbonyl]- (CA INDEX NAME)

Absolute stereochemistry.

IT 842170-49-4P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of N-[[(methoxy)phenyl]ethyl][[(methyl)thio]phenyl]pyridinecarb oxamide by Suzuki coupling using BAL resin-bound (bromo)nicotinamide and (aryl)boronic acid derivative as reactants)

RN 842170-49-4 CAPLUS

CN 3-Pyridinecarboxamide, N-[2-(4-methoxyphenyl)ethyl]-5-[4-(methylthio)phenyl]- (CA INDEX NAME)

$$\begin{array}{c|c} \text{MeO} & \text{O} & \text{O} \\ \hline \\ \text{CH}_2\text{--}\text{CH}_2\text{--}\text{NH}\text{--}\text{C} & \text{N} \\ \hline \\ \text{SMe} \end{array}$$

OS.CITING REF COUNT: 21 THERE ARE 21 CAPLUS RECORDS THAT CITE THIS

RECORD (21 CITINGS)

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 13 OF 21 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2004:997837 CAPLUS

DOCUMENT NUMBER: 142:212159

TITLE: High throughput screening of β -amyloid secretion

inhibitors using homogeneous time-resolved

fluorescence

AUTHOR(S): Albrecht, Hugo; Zbinden, Peter; Rizzi, Andrea;

Villetti, Gino; Riccardi, Benedetta; Puccini, Paola;

Catinella, Silvia; Imbimbo, Bruno P.

CORPORATE SOURCE: Integrated Drug Discovery Division, Discovery Partners

International, Allschwil, CH-4123/1, Switz.

SOURCE: Combinatorial Chemistry and High Throughput Screening

(2004), 7(8), 745-756

CODEN: CCHSFU; ISSN: 1386-2073 Bentham Science Publishers Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

PUBLISHER:

AB A cell-based assay using homogeneous time-resolved fluorescence has been developed for high throughput screening of putative β -amyloid $(A\beta)$ production inhibitors. In this assay, total $A\beta$ is detected by simply adding two com. available antibody complexes. The first was a biotinylated monoclonal antibody (4G8), specifically recognizing an epitope comprising the residues 17-24 of the A β peptide, complexed with europium cryptate-streptavidin conjugate. The second was a polyclonal antibody (BioS-N), raised against the N-terminus of the Aetapeptide, complexed with an allophycocyanin-anti rabbit antibody conjugate. Binding of the two complexes to the $A\beta$ peptide brought europium cryptate (fluorescence donor) and allophycocyanin (fluorescence acceptor) into close proximity, consequently a fluorescent resonance energy transfer signal was produced upon excitation at 337 nm. The resulting fluorescence signal (665 nm) was then detected using a Discovery or a ViewLux reader. Detection of $A\beta$ by the proposed method is possible at concns. of approx. 1 nM. The method was employed for the detection of $\ensuremath{A\beta}$ secreted from a stable transfected human neuroglioma cell line (H4) overexpressing a mutated form of the human amyloid precursor protein (APP695NL) and developed for robotic automation. At optimized conditions,

signal-to-background ratios exceeding 5 and Z' factors around 0.7 were achieved in a 384-well format. High throughput screening of 56,913 potential $A\beta$ production inhibitors led to identification of new non-cytotoxic and cell permeable compds. With potencies in the submicromolar range.

IT 840530-44-1 840530-45-2 840530-46-3 840530-47-4 840530-48-5 840530-49-6

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); BIOL (Biological study)

(high throughput screening of $\beta\text{-amyloid}$ secretion inhibitors using homogeneous time-resolved fluorescence)

RN 840530-44-1 CAPLUS

CN 3-Pyridinecarboxamide, N-[[3-(aminomethyl)cyclohexyl]methyl]-5-(4-fluorophenyl)-N-[[4-(trifluoromethoxy)phenyl]methyl]- (CA INDEX NAME)

RN 840530-45-2 CAPLUS

CN 3-Pyridinecarboxamide, N-(4-aminocyclohexyl)-5-(4-methylphenyl)-N-[[4-(trifluoromethoxy)phenyl]methyl]- (CA INDEX NAME)

$$R_{3}C-0$$
 $CH_{2}-N$
 $CH_{2}-N$
 Me

RN 840530-46-3 CAPLUS

CN 3-Pyridinecarboxamide, N-[[4-(aminomethyl)phenyl]methyl]-5-(3-nitrophenyl)- N-[[4-(trifluoromethoxy)phenyl]methyl]- (CA INDEX NAME)

RN 840530-47-4 CAPLUS

CN 3-Pyridinecarboxamide, N-[[3-(aminomethyl)cyclohexyl]methyl]-5-(3-nitrophenyl)-N-[[4-(trifluoromethoxy)phenyl]methyl]- (CA INDEX NAME)

RN 840530-48-5 CAPLUS

CN 3-Pyridinecarboxamide, N-(2-aminoethyl)-5-(4-ethoxyphenyl)-N-[[4-(trifluoromethoxy)phenyl]methyl]- (CA INDEX NAME)

$$\begin{array}{c|c} \text{F}_3\text{C}-\text{O} & \text{CH}_2-\text{CH}_2-\text{NH}_2 \\ \text{CH}_2-\text{N}-\text{C} & \text{N} \\ \text{O} & \text{OEt} \end{array}$$

RN 840530-49-6 CAPLUS

CN 3-Pyridinecarboxamide, N-(2-aminoethyl)-5-[4-(1-methylethyl)phenyl]-N-[[4-(trifluoromethoxy)phenyl]methyl]- (CA INDEX NAME)

$$\begin{array}{c|c} \text{F}_3\text{C}-\text{O} & \text{CH}_2-\text{CH}_2-\text{NH}_2 \\ \text{CH}_2-\text{N}-\text{C} & \text{N} \\ \text{O} & \text{i-Pr} \end{array}$$

REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 14 OF 21 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2004:534176 CAPLUS

DOCUMENT NUMBER: 141:89017

TITLE: A preparation of nicotinamide-based tyrosine kinase

inhibitors

INVENTOR(S): Burns, Christopher John; Kling, Marcel Robert

PATENT ASSIGNEE(S): Cytopia Pty. Ltd., Australia

SOURCE: PCT Int. Appl., 71 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	PATENT NO.					KIND DATE				APPLICATION NO.								
WO	WO 2004054977				A1 20040701				WO 2003-AU1666						2	0031	215	
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,	
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KP,	KR,	KΖ,	LC,	
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	
		NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ΤJ,	
		TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW		
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	
		BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	
		ES,	FΙ,	FR,	GB,	GR,	HU,	IE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	
		TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG
CA	2508	171			A1		2004	0701		CA 2	003-	2508	171		2	0031	215	
AU	2003	2918	39		A1	A1 20040709			AU 2003-291839				20031215					
AU	2003	2918	39		В2		2009	0122										
EP	1569	907			A1		2005	0907		EP 2	003-	7672	97		2	0031	215	
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,	
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK		
JP	2006	5107	37		Τ		2006	0330		JP 2	005-	5023	89		2	0031	215	
US	2007	0060	619		A1		2007	0315	US 2006-537719				19	20061011				
RIORIT	IORITY APPLN. INFO.:								AU 2002-953330				A 20021213					
										AU 2	002-	9533	85		A 2	0021	217	

US 2003-483400P P 20030626 WO 2003-AU1666 W 20031215

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 141:89017

GΙ

AB The invention relates to a preparation of nicotinamide derivs. of formula I [wherein: A is O, S, NH, or N-C1-4alkyl; B is (un)substituted (hetero)aryl; Q is a bond or C1-4alkyl; W is H, (un)substituted C1-4alkyl or C2-6alkenyl; Y is H or (un)substituted (hetero)aryl], useful as kinase inhibitors. Compds. of formula I are useful in the treatment of tyrosine kinase-associated diseases such as carcinoma, cancer, and Alzheimer disease. For instance, pyridineamide derivative II at a concentration of 10 $\mu\rm M$ inhibited

ΙI

50% or greater of jak2, jak3, and fms enzyme activities. ΙT 713520-01-5P 713520-19-5P 713520-29-7P 713520-36-6P 713520-43-5P 713520-93-5P 713521-06-3P 713521-13-2P 713521-36-9P 713521-39-2P 713521-44-9P 713521-49-4P 713521-62-1P 713521-67-6P 713521-81-4P 713521-90-5P 713521-93-8P 713522-03-3P 713522-10-2P 713522-13-5P 713522-24-8P 713522-51-1P 713522-33-9P 713522-45-3P 713522-74-8P 713522-53-3P 713522-66-8P 713522-77-1P 713522-79-3P 713522-81-7P 713522-88-4P 713522-91-9P 713522-93-1P 713523-24-1P 713523-25-2P 713523-29-6P 713523-32-1P 713523-33-2P 713523-35-4P 713523-42-3P 713523-43-4P 713523-44-5P 713523-45-6P 713523-48-9P 713523-50-3P 713523-51-4P 713523-52-5P 713523-53-6P 713523-57-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of nicotinamide-based kinase inhibitors)

RN 713520-01-5 CAPLUS

CN 3-Pyridinecarboxamide, 5-(4-hydroxy-3,5-dimethylphenyl)-N-[(1S)-1-phenylethyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 713520-19-5 CAPLUS

CN 3-Pyridinecarboxamide, 5-(4-hydroxy-3,5-dimethylphenyl)-N-(2-phenylethyl)- (CA INDEX NAME)

RN 713520-29-7 CAPLUS

CN 3-Pyridinecarboxamide, 5-(1,3-benzodioxol-5-yl)-N-[(3-fluorophenyl)methyl]- (CA INDEX NAME)

RN 713520-36-6 CAPLUS

CN 3-Pyridinecarboxamide, 5-(1,3-benzodioxol-5-yl)-N-[[4-(dihydro-2H-1,3-oxazin-3(4H)-yl)phenyl]methyl]- (CA INDEX NAME)

RN 713520-43-5 CAPLUS
CN 3-Pyridinecarboxamide, 5-(1,3-benzodioxol-5-yl)-N-[(2,5-dimethylphenyl)methyl]- (CA INDEX NAME)

RN 713520-93-5 CAPLUS
CN 3-Pyridinecarboxamide, 5-(4-fluorophenyl)-N-[[4-(4-methyl-1-piperazinyl)phenyl]methyl]- (CA INDEX NAME)

$$\begin{array}{c|c} F \\ \hline \\ O \\ N \\ \hline \\ C \\ -NH \\ -CH_2 \\ \hline \end{array} \qquad \begin{array}{c} Me \\ \\ N \\ \end{array}$$

RN 713521-06-3 CAPLUS

CN 3-Pyridinecarboxamide, 5-(4-hydroxy-3-methoxyphenyl)-N-[(1S)-1-(3-methoxyphenyl)ethyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 713521-13-2 CAPLUS

CN 3-Pyridinecarboxamide, N-[(3,4-dichlorophenyl)methyl]-5-(3-methoxyphenyl)-(CA INDEX NAME)

$$\begin{array}{c|c} C1 & \\ C1 & \\ CH_2-NH-C & \\ N \\ \end{array}$$

RN 713521-36-9 CAPLUS

CN 3-Pyridinecarboxamide, 5-(4-hydroxyphenyl)-N-[(1R)-1-phenylethyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 713521-39-2 CAPLUS

CN 3-Pyridinecarboxamide, N-[(3,4-dichlorophenyl)methyl]-5-(4-hydroxyphenyl)- (CA INDEX NAME)

RN 713521-44-9 CAPLUS

CN 3-Pyridinecarboxamide, N-[(3,5-dimethoxyphenyl)methyl]-5-(4-hydroxyphenyl)-(CA INDEX NAME)

RN 713521-49-4 CAPLUS

CN 3-Pyridinecarboxamide, N-[(3-fluorophenyl)methyl]-5-(4-hydroxyphenyl)- (CA INDEX NAME)

$$\begin{array}{c|c} & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\$$

RN 713521-62-1 CAPLUS

CN 3-Pyridinecarboxamide, 5-(4-hydroxyphenyl)-N-[(4-methylphenyl)methyl]- (CA INDEX NAME)

RN 713521-67-6 CAPLUS

CN 3-Pyridinecarboxamide, 5-(4-hydroxyphenyl)-N-(2-phenylethyl)- (CA INDEX NAME)

RN 713521-81-4 CAPLUS

CN 3-Pyridinecarboxamide, 5-(4-hydroxyphenyl)-N-methyl-N-(phenylmethyl)- (CA INDEX NAME)

RN 713521-90-5 CAPLUS

CN 3-Pyridinecarboxamide, N-[1-(4-fluorophenyl)ethyl]-5-(4-hydroxyphenyl)- (CA INDEX NAME)

RN 713521-93-8 CAPLUS

CN 3-Pyridinecarboxamide, 5-(4-hydroxy-3,5-dimethylphenyl)-N-[(1R)-1-phenylethyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 713522-03-3 CAPLUS

CN 3-Pyridinecarboxamide, N-[(3,5-dimethoxyphenyl)methyl]-5-(4-hydroxy-3,5-dimethylphenyl)- (CA INDEX NAME)

RN 713522-10-2 CAPLUS

CN 3-Pyridinecarboxamide, 5-(4-hydroxy-3,5-dimethylphenyl)-N-[(4-methoxyphenyl)methyl]- (CA INDEX NAME)

$$\begin{array}{c|c} \text{MeO} & \text{O} \\ \hline \\ \text{CH}_2 - \text{NH} - \text{C} \\ \hline \\ \text{Me} & \text{OH} \\ \end{array}$$

RN 713522-13-5 CAPLUS

CN 3-Pyridinecarboxamide, 5-(4-hydroxy-3,5-dimethylphenyl)-N-[(4-methylphenyl)methyl]- (CA INDEX NAME)

RN 713522-24-8 CAPLUS

CN 3-Pyridinecarboxamide, 5-(4-hydroxy-3,5-dimethylphenyl)-N-(1-methyl-3-phenylpropyl)- (CA INDEX NAME)

RN 713522-33-9 CAPLUS

CN 3-Pyridinecarboxamide, 5-(2-chloro-3,4,5-trimethoxyphenyl)-N-[(1R)-1-phenylethyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 713522-45-3 CAPLUS

CN 3-Pyridinecarboxamide, 5-(2-chloro-3,4,5-trimethoxyphenyl)-N-[(3-fluorophenyl)methyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & &$$

RN 713522-51-1 CAPLUS

CN 3-Pyridinecarboxamide, 5-(2-chloro-3,4,5-trimethoxyphenyl)-N-[(4-methylphenyl)methyl]- (CA INDEX NAME)

$$\begin{array}{c|c} \text{Me} & \text{O} & \text{O} \\ \text{CH}_2 - \text{NH} - \text{C} & \text{N} \\ \text{Cl} & \text{MeO} & \text{OMe} \\ \end{array}$$

RN 713522-53-3 CAPLUS

CN 3-Pyridinecarboxamide, 5-(2-chloro-3,4,5-trimethoxyphenyl)-N-(2-phenylethyl)- (CA INDEX NAME)

RN 713522-66-8 CAPLUS

CN 3-Pyridinecarboxamide, 5-(2-chloro-3,4,5-trimethoxyphenyl)-N-(1-methyl-3-phenylpropyl)- (CA INDEX NAME)

RN 713522-74-8 CAPLUS

CN 3-Pyridinecarboxamide, 5-(2-chloro-3,4,5-trimethoxyphenyl)-N-[[4-(4-morpholinyl)phenyl]methyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & \\ & & \\ & & \\$$

RN 713522-77-1 CAPLUS

CN 3-Pyridinecarboxamide, 5-(1,3-benzodioxol-5-yl)-N-[(1R)-1-phenylethyl]-(CA INDEX NAME)

Absolute stereochemistry.

RN 713522-79-3 CAPLUS

CN 3-Pyridinecarboxamide, 5-(1,3-benzodioxol-5-yl)-N-[(1S)-1-phenylethyl]-(CA INDEX NAME)

Absolute stereochemistry.

RN 713522-81-7 CAPLUS

CN 3-Pyridinecarboxamide, 5-(1,3-benzodioxol-5-yl)-N-[(3,4-dichlorophenyl)methyl]- (CA INDEX NAME)

RN 713522-88-4 CAPLUS

CN 3-Pyridinecarboxamide, 5-(1,3-benzodioxol-5-yl)-N-[(3,5-yl)]

dimethoxyphenyl)methyl]- (CA INDEX NAME)

RN 713522-91-9 CAPLUS
CN 3-Pyridinecarboxamide, 5-(1,3-benzodioxol-5-yl)-N-[(4-methoxyphenyl)methyl]- (CA INDEX NAME)

RN 713522-93-1 CAPLUS
CN 3-Pyridinecarboxamide, 5-(1,3-benzodioxol-5-yl)-N-(2-phenylethyl)- (CA INDEX NAME)

RN 713523-24-1 CAPLUS

CN 3-Pyridinecarboxamide, 5-(4-fluorophenyl)-N-[(1S)-1-phenylethyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 713523-25-2 CAPLUS

CN 3-Pyridinecarboxamide, N-[(3,4-dichlorophenyl)methyl]-5-(4-fluorophenyl)- (CA INDEX NAME)

$$\begin{array}{c|c} C1 & \\ C1 & \\ CH_2-NH-C & \\ \end{array}$$

RN 713523-29-6 CAPLUS

CN 3-Pyridinecarboxamide, 5-(4-fluorophenyl)-N-[(4-fluorophenyl)methyl]- (CA INDEX NAME)

$$\begin{array}{c|c} F & O & \\ \hline \\ CH_2-NH-C & N \\ \hline \\ F & \end{array}$$

RN 713523-32-1 CAPLUS

CN 3-Pyridinecarboxamide, 5-(4-fluorophenyl)-N-[(4-methylphenyl)methyl]- (CA INDEX NAME)

$$\begin{array}{c|c} \text{Me} & \text{O} & \text{O} \\ \hline & \text{CH}_2 - \text{NH} - \text{C} & \text{N} \\ \hline & \text{F} \end{array}$$

RN 713523-33-2 CAPLUS

CN 3-Pyridinecarboxamide, 5-(4-fluorophenyl)-N-[(1S)-1-(3-methoxyphenyl)ethyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 713523-35-4 CAPLUS

CN 3-Pyridinecarboxamide, 5-(4-fluorophenyl)-N-methyl-N-(phenylmethyl)- (CA INDEX NAME)

RN 713523-42-3 CAPLUS

CN 3-Pyridinecarboxamide, 5-(4-fluorophenyl)-N-[(1R)-1-phenylethyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 713523-43-4 CAPLUS

CN 3-Pyridinecarboxamide, 5-(2-chloro-3,4,5-trimethoxyphenyl)-N-[(3,5-dimethoxyphenyl)methyl]- (CA INDEX NAME)

RN 713523-44-5 CAPLUS

CN 3-Pyridinecarboxamide, 5-(3-methoxyphenyl)-N-[(1R)-1-phenylethyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 713523-45-6 CAPLUS

CN 3-Pyridinecarboxamide, 5-(3-methoxyphenyl)-N-[(1S)-1-phenylethyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 713523-48-9 CAPLUS

CN 3-Pyridinecarboxamide, N-[(3,5-dimethoxyphenyl)methyl]-5-(3-methoxyphenyl)- (CA INDEX NAME)

$$\begin{array}{c} \text{OMe} \\ \\ \text{MeO} \end{array}$$

RN 713523-50-3 CAPLUS

CN 3-Pyridinecarboxamide, 5-(3-methoxyphenyl)-N-[(4-methoxyphenyl)methyl]- (CA INDEX NAME)

RN 713523-51-4 CAPLUS

CN 3-Pyridinecarboxamide, 5-(3-methoxyphenyl)-N-[(4-methylphenyl)methyl]-(CA INDEX NAME)

RN 713523-52-5 CAPLUS

CN 3-Pyridinecarboxamide, 5-(3-methoxyphenyl)-N-(2-phenylethyl)- (CA INDEX NAME)

RN 713523-53-6 CAPLUS

CN 3-Pyridinecarboxamide, 5-(3-methoxyphenyl)-N-[(1S)-1-(3-methoxyphenyl)ethyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 713523-57-0 CAPLUS

CN 3-Pyridinecarboxamide, 5-(3-methoxyphenyl)-N-(1-methyl-3-phenylpropyl)-(CA INDEX NAME)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

(1 CITINGS)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 15 OF 21 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2004:453614 CAPLUS

DOCUMENT NUMBER: 141:173950

TITLE: A Fluorous-Tagged, Acid-Labile Protecting Group for

the Synthesis of Carboxamides and Sulfonamides Villard, Anne-Laure; Warrington, Brian H.; Ladlow,

Mar

AUTHOR(S):

CORPORATE SOURCE: University Chemical Laboratory, GlaxoSmithKline

Cambridge Technology Centre, Cambridge, CB2 1EW, UK

SOURCE: Journal of Combinatorial Chemistry (2004), 6(4),

611-622

CODEN: JCCHFF; ISSN: 1520-4766

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 141:173950

AB A new acid-labile, fluorous-tagged protecting group that facilitates the preparation of carboxamides and sulfonamides by parallel solution-phase synthesis

is introduced. Its use is exemplified by the preparation of a 27-member library of biaryl sulfonamides and an 18-member library of biaryl carboxamides. Intermediates were purified by solid-phase extraction over reversed-phase fluorous silica gel to afford library members in high yields and purities (>95%) without the need for column chromatog. purification

IT 734549-12-3P 734549-13-4P 734549-18-9P 734549-19-0P 734549-24-7P 734549-25-8P

RL: CPN (Combinatorial preparation); CRT (Combinatorial reactant); RCT (Reactant); CMBI (Combinatorial study); PREP (Preparation); RACT (Reactant or reagent)

(N-deprotection; parallel solution-phase synthesis of carboxamides and sulfonamides using a fluorous-tagged acid-labile protecting group)

RN 734549-12-3 CAPLUS

CN 3-Pyridinecarboxamide, N-[[4-[(4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-heptadecafluoroundecyl)oxy]-2-methoxyphenyl]methyl]-5-(4-methylphenyl)-N-[(4-methylphenyl)methyl]- (CA INDEX NAME)

RN 734549-13-4 CAPLUS

CN 3-Pyridinecarboxamide, 5-(2-fluorophenyl)-N-[[4-[(4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-heptadecafluoroundecyl)oxy]-2-methoxyphenyl]methyl]-N-[(4-methylphenyl)methyl]- (CA INDEX NAME)

RN 734549-18-9 CAPLUS

CN 3-Pyridinecarboxamide, N-[[4-[(4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-heptadecafluoroundecyl)oxy]-2-methoxyphenyl]methyl]-5-(4-methylphenyl)-N-(2-phenylethyl)- (CA INDEX NAME)

RN 734549-19-0 CAPLUS

CN 3-Pyridinecarboxamide, 5-(2-fluorophenyl)-N-[[4-[(4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-heptadecafluoroundecyl)oxy]-2-methoxyphenyl]methyl]-N-(2-phenylethyl)- (CA INDEX NAME)

RN 734549-24-7 CAPLUS

CN 3-Pyridinecarboxamide, N-[[4-[(4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-heptadecafluoroundecyl)oxy]-2-methoxyphenyl]methyl]-5-(4-methylphenyl)-N-(2-thienylmethyl)- (CA INDEX NAME)

$$S$$
 CH_2-N-C
 N
 CH_2
 MeO
 $F_3C-(CF_2)_7-(CH_2)_3-O$
 Me

RN 734549-25-8 CAPLUS

CN 3-Pyridinecarboxamide, 5-(2-fluorophenyl)-N-[[4-[(4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-heptadecafluoroundecyl)oxy]-2-methoxyphenyl]methyl]-N-(2-thienylmethyl)- (CA INDEX NAME)

 $F_3C-(CF_2)_7-(CH_2)_3-O$

IT 734549-30-5P 734549-31-6P 734549-36-1P 734549-37-2P

RL: CPN (Combinatorial preparation); CMBI (Combinatorial study); PREP (Preparation)

(parallel solution-phase synthesis of carboxamides and sulfonamides using a fluorous-tagged acid-labile protecting group)

RN 734549-30-5 CAPLUS

CN 3-Pyridinecarboxamide, 5-(4-methylphenyl)-N-[(4-methylphenyl)methyl]- (CA INDEX NAME)

$$\begin{array}{c|c} \text{Me} & \text{O} & \text{O} \\ \text{CH}_2 - \text{NH} - \text{C} & \text{N} \\ \\ \text{Me} & \text{Me} \end{array}$$

RN 734549-31-6 CAPLUS

CN 3-Pyridinecarboxamide, 5-(2-fluorophenyl)-N-[(4-methylphenyl)methyl]- (CA INDEX NAME)

RN 734549-36-1 CAPLUS

CN 3-Pyridinecarboxamide, 5-(4-methylphenyl)-N-(2-phenylethyl)- (CA INDEX NAME)

RN 734549-37-2 CAPLUS

CN 3-Pyridinecarboxamide, 5-(2-fluorophenyl)-N-(2-phenylethyl)- (CA INDEX NAME)

OS.CITING REF COUNT: 21 THERE ARE 21 CAPLUS RECORDS THAT CITE THIS

RECORD (21 CITINGS)

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 16 OF 21 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2003:796416 CAPLUS

DOCUMENT NUMBER: 139:307686

TITLE: Preparation of 2,3-diphenylpyridines as cannabinoid-1

receptor antagonists and inverse agonists

INVENTOR(S): Finke, Paul E.; Meurer, Laura C.; Debenham, John S.;

Toupence, Richard B.; Walsh, Thomas F.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA SOURCE: PCT Int. Appl., 211 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.				KIN	D	DATE			APPLICATION NO.					DATE				
	WO 2003082191 WO 2003082191					A2 20031009 A3 20040115			;	WO 2003-US9005						20030324		
NO	W:	AE, CO, GM, LT,	AG, CR, HR, LU,	CU, HU, LV,	AM, CZ, ID, MA,	AT, DE, IL, MD,	AU, DK, IN, MG, SD,	AZ, DM, IS, MK,	DZ, JP, MN,	EC, KE, MW,	EE, KG, MX,	ES, KR, MZ,	FI, KZ, NI,	GB, LC, NO,	GD, LK, NZ,	GE, LR, OM,	GH, LS, PH,	
	RW:	GH,	GM,	KE,	LS,	MW,	VN, MZ, TM,	SD,	SL,	SZ,	TZ,							

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FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     CA 2479744
                                 20031009
                                             CA 2003-2479744
                                                                      20030324
                           Α1
     AU 2003225964
                                 20031013
                                             AU 2003-225964
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     AU 2003225964
                           В2
                                 20081120
                                             EP 2003-745578
     EP 1492784
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                                 20050105
                                                                      20030324
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     JP 2005531520
                           Τ
                                 20051020
                                             JP 2003-579734
                                                                      20030324
     US 20050182103
                                 20050818
                                             US 2004-508043
                                                                      20040917
                           Α1
     US 7271266
                           В2
                                 20070918
PRIORITY APPLN. INFO.:
                                             US 2002-368334P
                                                                  Ρ
                                                                     20020328
                                             WO 2003-US9005
                                                                     20030324
                                                                  W
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT MARPAT 139:307686 OTHER SOURCE(S): GΙ

$$R^4$$
 R^5
 R^3
 R^2
 R^6
 R^7
 R^7
 R^7

Title compds. I [wherein R1 = H, halo, CN, or (un)substituted alkyl, AΒ heterocycloalkyl(alkyl), heteroaryl, (hetero)arylalkyl, acyl, carboxy, (thio)ether, amino, carbamoyl, acylamino, carboxyamino, or ureido; R2 = H, CN, carboxy, halo, NO2, CF3, or (un)substituted carbamoyl; provided that R1 and R2 are not both H; R3 = H, CF3, or (un)substituted (cyclo)alkyl; R4-R7 = independently H, halo, amino, carboxy, alkyl, alkoxy, aryl(alkyl), OH, CF3, alkanoyloxy, or carbamoyloxy; provided that R6 and R7 are not both H; and pharmaceutically acceptable salts thereof] were prepared as cannabinoid-1 (CB1) receptor antagonists and/or inverse agonists (no data). For example, benzyl 4-chlorophenyl ketone was condensed with DMF dimethylacetal in DMF to give 3-(dimethylamino)-1-(4-chlorophenyl)-2phenylprop-2-en-1-one. Cyclocondensation of the vinyl ketone with cyanoacetamide using NaH in DMF and MeOH provided the 3-cyano-2-pyridone. Conversion of the nitrile to the carboxylic acid with 50% H2SO4, followed by esterification using HCl in MeOH gave Me 6-(4-chlorophenyl)-5-phenyl-2-oxo-1,2-dihydropyridine-3-carboxylate.

O-alkylation of the pyridone with benzyl bromide in the presence of Cs2CO3 in DMF afforded the title 2,3-diphenylpyridine II. Compds. of the invention and their pharmaceutical compns. serve as centrally acting drugs for the treatment, prevention, and suppression of diseases mediated by the CB1 receptor, such as psychosis, memory deficits, cognitive disorders, migraine, neuropathy, neuro-inflammatory disorders including multiple sclerosis and Guillain-Barre syndrome, the inflammatory sequelae of viral encephalitis, cerebral vascular accidents, and head trauma, anxiety disorders, stress, epilepsy, Parkinson's disease, movement disorders, and schizophrenia (no data). I are also useful for the treatment of substance abuse disorders, obesity or eating disorders, asthma, constipation, chronic intestinal pseudo-obstruction, and cirrhosis of the liver (no data).

IT 611218-14-5P, N-Benzyl-2-(benzyloxy)-6-(4-chlorophenyl)-5-phenylpyridine-3-carboxamide

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(CB1 modulator; preparation of diphenylpyridines as CB1 antagonists and inverse agonists for treatment of eating disorders and other CB1 mediated diseases)

RN 611218-14-5 CAPLUS

CN 3-Pyridinecarboxamide, 6-(4-chlorophenyl)-5-phenyl-2-(phenylmethoxy)-N-(phenylmethyl)- (CA INDEX NAME)

OS.CITING REF COUNT: 26 THERE ARE 26 CAPLUS RECORDS THAT CITE THIS

RECORD (27 CITINGS)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 17 OF 21 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2002:428866 CAPLUS

DOCUMENT NUMBER: 137:20297

TITLE: Preparation of ortho-substituted and meta-substituted

bisaryl compounds as potassium channel blockers

INVENTOR(S): Peukert, Stefan; Brendel, Joachim; Hemmerle, Horst;

Kleemann, Heinz-Werner

PATENT ASSIGNEE(S): Aventis Pharma Deutschland GmbH, Germany

SOURCE: PCT Int. Appl., 67 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 2002044137 A1 20020606 WO 2001-EP13294 20011117

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,

GΙ

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CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
                               GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
                               LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
                               RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ,
                               VN, YU, ZA, ZW
                      RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
                               CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
                               BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
             DE 10059418 A1 20020620 DE 2000-10059418 20001130
                                                                        20020606
                                                                                               CA 2001-2430273
                                                          A1
                                                        A 20020611 AU 2002-27931
A 20030616 EE 2003-183
A1 20030903 EP 2001-989479
B1 20050216
             AU 2002027931
                                                                                                                                                       20011117
             EE 200300183
                                                                                                                                                        20011117
             EP 1339675
                                                                                                                                                       20011117
             EP 1339675
                     R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

BR 2001015769 A 20040113 BR 2001-15769 20011117

CN 1494527 A 20040128 HU 2003-3317 20011117

CN 1290825 C 20061220

JP 2004514707 T 20040520 JP 2002-546507 20011117

JP 4051283 B2 20080220

NZ 526177 A 20040126 NZ 2001-526177 20011117

AT 289292 T 20050315 AT 2001-989479 20011117

PT 1339675 E 20050315 AT 2001-989479 20011117

ES 2236341 T3 20050716 ES 2001-989479 20011117

RU 2278858 C2 20060627 RU 2003-119153 20011117

RU 2278858 C2 20060627 RU 2003-119153 20011117

SK 286708 B6 20090305 SK 2003-653 20011117

TW 254039 B 20060501 TW 2001-995771 20011129

US 6605625 B2 20030812

MX 20030013719 A1 20030116 US 2001-995771 20011129

US 6605625 B2 20030812

MX 2003003893 A 20040415 ZA 2003-4386 20030520

NO 2003002438 A 20030904 MX 2003-4386 20030520

NO 2003002438 A 20030709 NO 2003-2438 20030528

HR 200300436 B1 20060430 HR 2003-436 20030528

HR 2003000436 B1 20060430 HR 2003-436 20030528

HR 2003002438 A 20030709 NO 2003-2438 20030528

HR 2003002438 A 20030709 NO 2003-2438 20030528

HR 2003002438 A 20030709 NO 2003-4386 20030528

HR 2003002438 A 20030709 NO 2003-2438 20030528

HR 2003002438 A 20030709 NO 2003-4366 20030528

HK 1061231 A1 20070511 HK 2004-104352 20040616

PRIORITY APPLN. INFO::

DE 2000-10055418 A 20041130

WO 2001-EP13229 W 20011117
                               IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                                                                                                                               W 20011117
                                                                                                     WO 2001-EP13294
                                                                                                     US 2001-EF13294 W 20011117
US 2001-995771 A3 20011129
 ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
 OTHER SOURCE(S): MARPAT 137:20297
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Ι

Title compds. [I; A1-A8 = N, CH, CR5; whereby >4 of A1-A8 = CH; R1 = AΒ CO2R9, SO2R10, COR11, C(O)NR12R13, C(S)NR12R13; R9-R12 = CxH2xR14; x =0-4; R14 = alkyl, cycloalkyl, CF3, C2F5, C3F7, CH2F, CHF2, OR15, S02Me, (substituted) Ph, naphthyl, etc.; R15 = alkyl, cycloalkyl, (substituted) Ph; R13 = H, alkyl, CF3; R2 = H, alkyl, CF3; R3 = CyH2yR16, etc.; y = 0-4; R16 = alkyl, cycloalkyl, CF3, C2F5, C3F7, CH2F, CHF2, OR17, SO2Me, (substituted) Ph, naphthyl, etc.; R17 = H, alkyl, cycloalkyl, (substituted) Ph, pyridyl; R4 = H, alkyl, CF3; or R3R4 = (O-, S-, NH-, N(methyl)-, N(benzyl)-interrupted) C4-5 alkylene; R5 = F, C1, Br, I, CF3, NO2, cyano, CO2Me, COMe, amino, OH, alkyl, alkoxy, etc.; R30, R31 = H, alkyl; or R30R31 = C2 alkylene], were prepared Thus, 1-[6-(2-aminomethylphenyl)pyridin-2-yl]-N-(4-methoxyphenyl)amide in CH2Cl2 was stirred with 4-methoxyphenylacetyl chloride and N-ethyldiisopropylamine overnight to give 78% 1-[6-(2-[2-(4-methoxyphenyl)acetylamino]methylphenyl)pyridin-2-yl]-N-(4-methoxyphenyl)acetylamino]methylphenyl)pyridin-2-yl]-N-(4-methoxyphenyl)acetylamino]methylphenyl)pyridin-2-yl]-N-(4-methoxyphenyl)acetylamino]methylphenyl)pyridin-2-yl]-N-(4-methoxyphenyl)acetylamino]methylphenyl)pyridin-2-yl]-N-(4-methoxyphenyl)acetylamino]methylphenyl)pyridin-2-yl]-N-(4-methoxyphenyl)acetylamino]methylphenyl)pyridin-2-yl]-N-(4-methoxyphenyl)acetylamino]methylphenyl)pyridin-2-yl]-N-(4-methoxyphenyl)acetylamino]methylphenyl)pyridin-2-yl]-N-(4-methoxyphenyl)acetylamino]methylphenyl)acetylamino]methylphenyl)acetylamino]methylphenyl)acetylamino]methylphenyl)acetylamino]methylphenyl)acetylamino]methylphenyl)acetylamino]methylphenyl)acetylamino]methylphenyl)acetylamino]methylphenyl)acetylamino[acetylamino]methylphenyl)acetylamino[acetylamino]methylphenyl]methylphenyl]methylphenylmethoxyphenyl) amide. Several I inhibited Kv1.5 human channel with IC50 = $2 - < 100 \mu M$.

IT 433969-45-0P 433969-65-4P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of ortho-substituted and meta-substituted bisaryl compds. as potassium channel blockers)

RN 433969-45-0 CAPLUS

CN Carbamic acid, [[2-[5-[[(2,4-difluorophenyl)methyl]amino]carbonyl]-3-pyridinyl]phenyl]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 433969-65-4 CAPLUS

CN 3-Pyridinecarboxamide, N-[(2,4-difluorophenyl)methyl]-5-[2-[[[2-(4-methoxyphenyl)acetyl]amino]methyl]phenyl]- (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD

(5 CITINGS)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 18 OF 21 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1997:226815 CAPLUS

DOCUMENT NUMBER: 126:212156

ORIGINAL REFERENCE NO.: 126:41031a,41034a

TITLE: Preparation of heteroarylcarboxamides as agrochemical

and medical fungicides

INVENTOR(S): Bartroli, Javier; Turmo, Enric; Anguita, Manuel

PATENT ASSIGNEE(S): J. Uriach & Cia. S.A., Spain

SOURCE: PCT Int. Appl., 84 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE				
WO 9705131	A1	19970213	WO 1996-EP3419	19960802				
W: AL, AM	, AT, AU, AZ	, BB, BG, 1	BR, BY, CA, CH, CN, C	CU, CZ, DE, DK,				
EE, ES	, FI, GB, GE	, HU, IL,	IS, JP, KE, KG, KP, K	KR, KZ, LK, LR,				
LS, LT	, LU, LV, MD	, MG, MK, I	MN, MW, MX, NO, NZ, P	L, PT, RO, RU,				
SD, SE								
RW: KE, LS	, MW, SD, SZ	, UG, AT, 1	BE, CH, DE, DK, ES, F	I, FR, GB, GR,				
IE, IT	, LU, MC, NL	, PT, SE, 1	BF, BJ, CF, CG, CI, C	CM				

ES	2107	376			A1	19971	1116	ES	1995-	1564			1	9950	802
ES	2107	376			В1	1998(701								
BR	9606	546			Α	19980	714	BR	1996-	6546			1	9950	802
ES	2112	774			A1	1998(0401	ES	1995-	2042			1	9951	020
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CA	2201	478			A1	1997(213	CA	1996-	2201	478		1	9960	802
AU	9667	889			А	19970)226	AU	1996-	6788	9		1	9960	802
EP	7835	02			A1	1997(716	EP	1996-	9284	04		1	9960	802
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		PT,	SE												
JP	1050	7205			T	19980	714	JP	1996-	5072	53		1	9960	802
US	5888	941			A	1999(0330	US	1997-	8098	15		1	9970	331
NO	9701	471			A	1997()530	NO	1997-	1471			1	9970	401
PRIORIT	Y APP	LN.	INFO	.:				ES	1995-	1564			A 1	9950	802
								ES	1995-	2042			A 1	9951	020
								WO	1996-	EP34	19	1	W 1	9960	802

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 126:212156
GI

AB RCH2CR5(OR4)CR1R2NR3COZ1(CH2)mZ2(CH2)qR6 [I; R = imidazolo or 1,2,4-triazo-1-yl; R1 = alkyl; R2 = H or alkyl; R1R2 = alkylene; R3 = H (halo)alkyl, Ph, etc.; R4 = H; R3R4 = CH2, CH2CH2, CH(OH)CH2, COCH2; R5 = (halo- or CF3-substituted) Ph; R6 = (un)substituted Ph, -heterocyclyl; Z1 = (un)substituted phenylene or -heterocyclyene; Z2 = bond, O, S00-2, NR6; m,q = 0-2] were prepared Thus, (2R,3R)-3-amino-2-(2,4-difluorophenyl)-1-(1H-1,2,4-triazol-1-yl)-2-butanol was amidated by 1-(4-chlorophenyl)-1H-pyrazole-4-carboxylic acid (preparation given) to give title compound (R,R)-II. Data for biol. activity of I were given.

II 187998-12-5P

ΙI

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of heteroarylcarboxamides as agrochem. and medical fungicides) RN 187998-12-5 CAPLUS

CN 3-Pyridinecarboxamide, 5-(4-chlorophenyl)-N-[(1R,2R)-2-(2,4-difluorophenyl)-2-hydroxy-1-methyl-3-(1H-1,2,4-triazol-1-yl)propyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD

(20 CITINGS)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 19 OF 21 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1983:198028 CAPLUS

DOCUMENT NUMBER: 98:198028

ORIGINAL REFERENCE NO.: 98:30095a,30098a

TITLE: Pyridine derivatives inducing tillering and

agricultural compositions containing them

INVENTOR(S): Stacey, Gilbert Joseph; Hawkins, Alan Francis;

Pearson, David Philip John; Sunley, Raymond Leo

PATENT ASSIGNEE(S): Imperial Chemical Industries PLC, UK

SOURCE: Eur. Pat. Appl., 40 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA.	TENT 1	NO.			KIND		DATE	A	APPLICATION NO.				DATE	
	6751: 6751:				A2 A3		1982 1983		E	P	1982-302208			19820429
	R:	AT,	BE,	CH,	DE,	FR,	GB,	ΙΤ,	LI,	LU	J, NL, SE			
GB	2099	421			А		1982	1208	G:	В	1982-12420			19820419
AU	8283	671			Α		1982	1125	A	U	1982-83671			19820513
US	4473	395			Α		1984	0925	U	S	1982-379047			19820517
BR	8202	376			А		1983	0426	B	R	1982-2876			19820518
JP	5719	7267			Α		1982	1203	J.	Ρ	1982-83339			19820519
PRIORIT	Y APP	LN.	INFO	.:					G:	В	1981-15251	A		19810519
									G:	В	1981-15252	A		19810519
									G:	В	1981-24941	A		19810814
									G:	В	1982-12420	A		19820419
									E	Ρ	1982-302208	A		19820429

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): CASREACT 98:198028; MARPAT 98:198028

GΙ

$$\begin{array}{c|c} R & & \\ & & \\ & N & \\ & O_n & R^2 & \\ & & I \end{array}$$

AB Phenylpyridine I [R = Ph, substituted Ph; R1 = cyano, carboxy, alkoxycarbonyl, alkylthiocarbonyl, carbamoyl; R2 = H, halogen, (un)substituted alkyl, OH, NH2, Ph, alkoxycarbonyl; n = 0, 1] were prepared Thus 4-ClC6H4CH2CO2H was treated with POCl3-DMF to give Me2NCH:C(CH0)C6H4Cl-4, which was cyclized with H2NCMe:CHCO2Et to form I (R = C6H4Cl-4; R1 = CO2Et; R2 = Me, n = 0)(II). II gave 132% of control barley tillering at 3 kg/ha.

IT 85583-04-6P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and tillering-inducing activity of)

RN 85583-04-6 CAPLUS

CN 3-Pyridinecarboxamide, 5-(4-chlorophenyl)-2-methyl-N-(phenylmethyl)- (CA INDEX NAME)

OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

L4 ANSWER 20 OF 21 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1974:70803 CAPLUS

DOCUMENT NUMBER: 80:70803

ORIGINAL REFERENCE NO.: 80:11435a,11438a

TITLE: Ampicillin derivatives substituted with heterocyclic

acyl groups

INVENTOR(S): Murakami, Masuo; Isaka, Ichiro; Koda, Akio; Kawahara,

Norio; Kashiwagi, Teruya; Ageo, Murakami; Yukiyasu, Urawa; Yano, Kanichiro; Nakano, Kohzo; Souzu, Isao

PATENT ASSIGNEE(S): Yamanouchi Pharmaceutical Co., Ltd.

SOURCE: Ger. Offen., 107 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2322750	A1	19731129	DE 1973-2322750	19730505
JP 49001592	A	19740108	JP 1972-45118	19720508
JP 55047036	В	19801127		
JP 49041396	A	19740418	JP 1972-83424	19720821
JP 49042692	A	19740422	JP 1972-85102	19720825

JP	49042693	A	19740422	JΡ	1972-85103		19720825
JP	49081388	A	19740806	JΡ	1972-125952		19721215
JP	49108092	A	19741014	JР	1973-19917		19730218
JP	49125386	A	19741130	JΡ	1973-38132		19730404
AU	7355045	A	19741107	AU	1973-55045		19730501
US	3953428	A	19760427	US	1973-356120		19730501
BE	799202	A1	19730831	BE	1973-130836		19730507
AT	7303995	A	19751215	ΑT	1973-3995		19730507
AT	331970	В	19760910				
DK	139754	В	19790409	DK	1973-2489		19730507
DK	139754	С	19790924				
FI	58131	В	19800829	FΙ	1973-1458		19730507
FI	58131	С	19801210				
FR	2183895	A1	19731221	FR	1973-16416		19730508
GB	1407566	A	19750924	GB	1973-21951		19730508
PRIORITY	Y APPLN. INFO.:			JΡ	1972-45118	Α	19720508
				JΡ	1972-83424	Α	19720821
				JΡ	1972-85102	Α	19720825
				JΡ	1972-85103	Α	19720825
				JΡ	1972-125952	Α	19721215
				JΡ	1973-19917	Α	19730218
				JP	1973-38132	Α	19730404
AR The	e ampicillin deriv	s T ($R = 1.4 - dih_{XC}$	dro-	$-4-0$ 00-3- α 1inolin	57 T	substitute

AB The ampicillin derivs. I (R = 1,4-dihydro-4-oxo-3-quinolinyl, substituted by alkyl, halo, nitro, or amino groups; substituted 4-oxonaphthyridin-3-yl, oxopyridinyl, hydroxypyridinyl, 2,4-dioxo-5-pyrimidinyl, oxopyranyl; R1 = Na, K) (>70 compds.) were prepared by treating ampicillin triethylamine salt with RCO2H, and forming the Na or K salt. Most I showed a min. inhibitory concentration against Pseudomonas aeruginosa of 10 γ /ml.

IT 51726-97-7P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

RN 51726-97-7 CAPLUS

CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid, 6-[[[(1,2-dihydro-2-oxo-5-phenyl-3-pyridinyl)carbonyl]amino]phenylacetyl]amino]-3,3-dimethyl-7-oxo-, monosodium salt, $[2S-[2\alpha,5\alpha,6\beta(S^*)]]-$ (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Na

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

L4 ANSWER 21 OF 21 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1962:73420 CAPLUS

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DOCUMENT NUMBER:
                         56:73420
ORIGINAL REFERENCE NO.: 56:14235d-i,14236a-i,14237a-i,14238a-i,14239a-d
TITLE:
                         Synthesis of benzo[f]quinolines and ergolines from
                         5-phenyl-6-methyl-2-pyridones
AUTHOR(S):
                         Walker, Gordon N.; Weaver, Barbara N.
CORPORATE SOURCE:
                         Ciba Pharm. Prods., Inc., Summit, NJ
SOURCE:
                         Journal of Organic Chemistry (1961), 26, 4441-55
                         CODEN: JOCEAH; ISSN: 0022-3263
DOCUMENT TYPE:
                         Journal
                         Unavailable
LANGUAGE:
OTHER SOURCE(S):
                         CASREACT 56:73420
     For diagram(s), see printed CA Issue.
     Dry MeONa (freshly prepared from 69 g. Na) powdered, suspended in 1 l.
anhydrous
     Et20, the mixture treated with 380 g. PhCH2Ac (I) and 300 g. HCO2Et (II) in
     500 ml. anhydrous Et20 with swirling and cooling in ice, when the MeONa had
     dissolved the solution kept overnight at room temperature (moisture excluded),
     treated with 1.5 l. H2O, the washed aqueous solution acidified with dilute
HCl, and
     the product isolated with Et20 gave 400 mg. PhCAc: CHOH (III), oil which
     crystallized after several weeks storage at 0\,^{\circ} in a closed container, m.
     69-71^{\circ} (Et20). I (81 g.) and 96 g. (Et02C)2 (IV) condensed as
     above with dry MeONa (from 16 q. Na) in 1 l. dry Et20 and the resulting
     oil (110 g.) kept several days deposited 15 g. Me
     2-phenylcyclopentane-1,3,4-trione-5-glyoxylate, m. 197-9°
     (Et20-Et0Ac); the clarified oil dried briefly in vacuo gave 80 g. crude
     AcCPh:C(OH)CO2Et (V). III (3.0 g.) in 70 ml. cold EtOH treated with
     excess alc.-N2H4, the solution warmed briefly on a steam cone, evaporated to 20
     ml., cooled in ice, treated gradually with 15% HCl until pH 8, diluted with
     H2O to form a homogeneous solution, and chilled and scratched gave 2.1 g. VI
     (R = H), m. 142-4^{\circ} (aqueous EtOH). III (5 g.) and 5 g. PhNHNH2 in 50
     ml. EtOH refluxed 1 hr. gave 3.4 g. VI (R = Ph), m. 158-60° (aqueous
     EtOH). I (150 g.) and 150 g. II treated with dry MeONa (from 28 g. Na) in
     700 ml. dry Et20, on the following day the mixture treated with 85 g.
     NCCH2CONH2 (VII) and 900 ml. MeOH, boiled 1 hr. to remove the Et2O,
     refluxed vigorously 3 hrs., concentrated, the residue chilled, treated with 150
     ml. concentrated HCl in 500 ml. cold H2O, the mixture kept 2 days at 0°,
     the precipitate collected, washed with H2O, and triturated with MeOH gave 94 g.
     3-cyano-4-methyl-5-phenyl-2-pyridinal, m. 190-2° (decomposition) (MeOH);
     when refluxed 3 hrs. with concentrated HCl the pyridone yielded quant. III.
III
     (80 g.) and 41 g. VII in 1 l. MeOH treated with 60 ml. piperidine
     (moderate exothermic reaction), when the solution had cooled nearly to room
     temperature (20 min.) the solution treated with 60 ml. AcOH, and kept 12 days
at
     room temperature gave (the ppts. were collected periodically; the mother liquor
     was concentrated in volume 10-20% and kept until no more product was obtained)
8
     q. VIII (R = CN), m. 294-6^{\circ} (decomposition) (MeOH); attempts to esterify
     the nitrile with MeOH-HCl resulted in incomplete conversion to ester. III
     (89 g.) and 46 g. VII in 700 ml. MeOH heated to 55°, treated with
     45 ml. pyridine and then with 50 ml. piperidine while swirling, the
     boiling solution cooled gradually to room temperature (1 hr.), kept overnight,
     treated with 100 ml. AcOH, boiled gently 2 hrs. on a steam bath until
     excess MeOH (400 ml.) was removed, and kept several days (or the ppts.
     periodically filtered off as above) gave 25-40 g. VIII [R = C(:NH)OMe]
     (IX), decomposing from 230° (MeOH). III (36 g.) and 26 g. NCCH2CO2Et
     in 200 ml. MeOH treated with 21 ml. piperidine, when the exothermic
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reaction subsided the solution refluxed 15 min., cooled, treated with 40 ml.

AcOH, and kept 7 days gave 12.2 g. VIII (R = CO2Et) (X), m. $230-2^{\circ}$

(MeOH). Repetition of the above experiment and the acidified solution seeded gave (on the same day) 9 g. X. IX (33 g.) and 900 ml. concentrated HCl refluxed 3 hrs., the boiling solution decanted from a small amount tar, and diluted with an equal volume cold H2O gave 28.6 g. VIII (R = CO2H) (XI), m. 269-71° (decomposition) (aqueous MeOH); the acid was also obtained by similar acid hydrolysis of VIII (R = CN) and X. Treatment of X with 50% aqueous solns. of appropriate primary amines gave the corresponding amides VIII (R = CONHR') (R' and m.p. given): Me, 316-18° (decomposition) (MeOH); Et, 249-51° (MeOH); CH2CH2NEt2, 180-2° (aqueous EtOH); (CH2)3NEt2, $181-2^{\circ}$ (aqueous EtOH); CH2CH2Ph, $248-50^{\circ}$ (EtOH); NH2, above 350° (EtOH). XI (3.2 g.) refluxed 1 hr. with 30 ml. POC13 containing 5 g. PC15, concentrated in vacuo (H2O pump) on a steam bath, the residue cooled, treated with 80 ml. EtOH, the solution concentrated, the residual oil treated with cold H2O, extracted with Et2O, the extract washed with aqueous K2CO3 and H2O, dried, and evaporated gave crude XII (R = Cl), oil. Crude XII (R = Cl) in 10 ml. H2O and 150 ml. EtOH containing 2 q. 10% Pd-C hydrogenated 2 hrs. at 3 atmospheric room temperature, filtered, the filtrate evaporated, the residual gum partitioned between Et20 and concentrated aqueous K2CO3, the Et20 layer separated, dried, and evaporated gave 1.5 g. XII (R = H), oil; picrate m. $147-8.5^{\circ}$ (EtOH). XII (R = H) (1 g.) and 6 g. IV treated with MeONa (from 1.3 g. Na) in MeOH, the solution refluxed 0.5 hr., evaporated, and the residue treated with H2O gave the Me enol ether of Me 3-carbomethoxy-5-phenyl-6-pyridylpyruvate, m. $173-4^{\circ}$ (MeOH); neutralization of the washed aqueous reaction solution and the extraction with Et2O gave 100 mg. corresponding enol, m. $152-3^{\circ}$ (MeOH), λ 223, 287, 316, 343 m μ , λ 3.26, 5.78, 5.82, 6.16 μ . Treatment of the enol and its Me ether with polyphosphoric acid (1 hr. at 100°) gave no cyclization products. Crude V (55.5 g.) and 25 g. VII in 500 ml. MeOH heated gently on a steam bath, the solution treated with 27 ml. piperidine, boiled gently 10 min., cooled, treated with 31 ml. AcOH, kept overnight, and partially evaporated gave (in several crops) 31.3 g. mixture (XIII) of XIV (R = Me and Et), m. $182-5^{\circ}$ (MeOH). XIII treated briefly with 20 ml. Ac2O and concentrated gave XIV (R = Me), m. 198-9° (MeOH-EtOAc). XIII treated with EtOH-EtONa and the solution acidified gave XIV (R = Et), m. $165-7^{\circ}$ (EtOH). XIV (R = Me) and XIV (R = $E\bar{t}$) treated 1 hr. at 100° with Ac20 gave apparently XV, decompose from 195° (Ac20-EtOAc). Both XIV (R = Me) and XIV (R = Et) treated with IV in the presence of Na alkoxides under varying conditions gave chiefly unchanged compound XIII (37.5 g.) in 1400 ml. concentrated HCl refluxed 40 min. and the resulting mixture chilled gave 30.5 g. 5-phenyl-6-methyl-2-pyridone-3,4-dicarboxylic acid (XVI), m. $225-30^{\circ}$ (decomposition); the corresponding anhydride (XVII) [obtained by heating (1.3 hrs.) 1 g. XVI in 50 ml. Ac20] m. 240-3° (decomposition) (EtOAc); mono-Me ester (prepared by dissolving XVI or XVII in MeOH and keeping the solution several days) decompose from 215° (MeOH-EtOAc). XVI (or XIII) (2.8 g.) in 200 ml. concentrated HCl refluxed 2.5 hrs., the solution

cooled, and treated with a little H2O gave 2.1 g. 5-phenyl-6-methyl-2-pyridone-4-carboxylic acid (XVIII), decomposing from 280° (MeOH); Me ester (prepared by refluxing 2 hrs. with MeOHHCl), m. $183-5^{\circ}$ (EtOAc); Et ester (by converting to the acid chloride with POCl3 containing some PCl5, removing the excess POCl3, and treating the residue with EtOH), m. $154-5^{\circ}$ (EtOH or EtOAc). XVIII (1 g.) in 150

days

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ml. AcOH containing 2 g. 10% Pd-C hydrogenated 1.5 hrs. at 45 lb./sq. in. at 75°, filtered, and the filtrate evaporated gave quant. 5-phenyl-6-methyl-2-piperidone-4-carboxylic acid, m. 196-7° (EtOAc), sensitive to alcs. and moisture (treatment with wet MeOH gave a compound, m. 218-20°, which appeared to be partly a hydrate of corresponding amino acid or acid ester; Me ester (by refluxing 3 hrs. with saturated MeOH-HCl) m. 157-9° (EtOAc). XI (20 g.) in 65 ml. (ClOC)2 (XIX) and 30 ml. POCl3 refluxed 40 min. (the solid was kept in contact with the liquid reagent), cooled, diluted with 100 ml. dry C6H6, the precipitate
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(24.6 g., apparently a P complex (XX) of the diacid chloride) collected, washed with C6H6, and ground up in cold H2O gave 22.3 g. crude 3-carboxy-5-phenyl-2-pyridone-6-pyruvic acid (XXI), decomposing from 190°; di-Et ester (by treating crude XX with absolute EtOH) m. 168-70° (MeOH). XVI (13.4 g.) in 40 ml. XIX and 40 ml. POCl3 refluxed 45 min., cooled, and diluted with 100 ml. dry C6H6 gave 10.2 g. XXII, m. 241-4° (decomposition). XXII treated with MeOH, H2O, or aqueous acids gave poorly defined products. Crude XXI (22.6 g.) and 250 ml. concentrated H2SO4 stirred until XXI dissolved (3-4 hrs.), the solution kept 2

at room temperature, poured over 2 kg. chopped ice with stirring, the mixture stirred or kept until the ice melted and the precipitate became easily filterable, the precipitate collected, washed with several portions H2O, and triturated with MeOH gave 15.8 g. 3-hydroxybenzo[f]q inoline-2,6-dicarboxylic acid (XXIII), m. above 360° (MeOH); XXIII appeared to be slightly solvated. Crude XXI (2 g.) cyclized as above, the H2SO4 mixture(30 ml.) poured into 15 ml. absolute EtOH, the solution heated 0.5 hr.

on a steam bath and the neutral product recrystd. from EtOH gave 0.5 g. di-Et ester (XXIV) of XXIII, m. 209-11°. XXIII (1.2 g.) refluxed 0.6 hrs. with 100 ml. SOC12, concentrated, and the residue treated with EtNH2 gave the corresponding bis(N-ethylamide), m. above 360° (EtOH and EtOAc). XXIII (5.1 g.) in 100 ml. concentrated HNO3 refluxed gently 10 min., the solution filtered while warm [1.3 g. isomeric NO2 derivative (XXV) red],

and the filtrate diluted with cold H2O gave 4.4 g. 8-NO2 derivative (XXVI) of XXIII, decomposing from 280° . XXVI (9.2 g.) in 350 ml. H2O and 9 ml. concentrated aqueous NH3 containing 5 g. 10% Pd-C hydrogenated at 45 lb./sq.

lb./sq. in. H absorbed in 20 min.) and the filtered solution treated with concentrated HCl gave 8 g. 8-NH2 derivative of XXIII, m. above 360° (repptn. from concentrated H2SO4 with H2O); N-Ac derivative m. above 350°. Similar reduction of XXV (presumably the 10-NO2 isomer) gave quant. the amino acid, m. above 360° (MeOH). XXIII (20 g.) 50 g. PCl5, and 200 ml. POCl3swirled and warmed gently until the solids dissolved and evolution of HCl was finished (5 min.), the solution refluxed 4 hrs., concentrated in vacuo (H2O

pump) on a steam bath, the residual crude chlorodiacid chloride (XXVII) chilled in ice, treated with 250 ml. MeOH, the mixture swirled briskly at below 45° (occasional brief immersion in an ice bath), after 5 min. kept 20-30 min. at 0°, the product collected, and washed with MeOH gave 16.5 g. 3-chlorobenzo[f]quinoline-2,6-dicarboxylic acid (XXVIII) di-Me ester(XXIX), m. 186-8° (EtOAc); the mother liquor kept several days at 0° deposited 1 g. apparently impure XXIII di-Me ester, m. 255-60°. Crude XXVII treated with EtOH as above, the crude product shaken with EtOAc and aqueous K2CO3, the EtOAc layer dried, and evaporated gave 65% XXVIII di-Et ester (XXX), m. 177-8° (EtOAc); the mother liquor kept several days at 0° deposited 20% XXIV, m. 207-9° (EtOH). Crude XXVII treated with appropriate anhydrous amines gave the following compds.: 3-dimethylamino-N,N,N',N'-

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tetramethylbenzo[f]quinoline-2,6-dicarboxamide, m. 228-30° (EtOAc);
     3-pyrrolidino-2,6-bispyrrolidinocarbonylbenzo[f]quinoline, m.
     235-7^{\circ} (EtOAc); 3-piperidino-2,6-
     dipiperidinocarbonylbenzo[f]quinoline, m. 196-7.5° (EtOAc);
     3-ethylamino-N, N'-diethylbenzo[f]quinoline-2, 6-dicarboxamide, m.
     300-2° (decomposition) (EtOAc). Crude XXVII treated with excess 1:3
     EtNH2-EtOH, the solution evaporated, the residue treated with H2O, and the
     product isolated with Et20 gave 3-chloro-N, N, N', N'-
     tetraethylbenzo[f]quinoline-2,6-dicarboxamide, m. 179-81°
     (cyclohexane-EtOAc); attempts to reduce this compound with NaBH4 in MeOH
     were unsuccessful. XXX (1.8 g.) in 150 ml. EtOH mixed with 2.5 g. 10%
     Pd-C in 80 ml. H2O, the mixture hydrogenated 3 hrs. at 45 lb./sq. in. at
     room temperature, filtered, the filtrate evaporated, the oily residue
dissolved in
     Et20, the solution shaken with aqueous K2CO3, separated, dried, evaporated,
and the
     residue triturated with Et20 gave 0.8 g.
     benzo[f]quinoline-2,6-dicarboxylic acid (XXXI) di-Et ester, m.
     96-8° (MeOH). XXX (5 g.) in 100 ml. EtOH treated with NaBH4 in
     small portions with stirring until there was no further exothermic
     effervescent reaction, the mixture treated with 5 q. addnl. NaBH4,
concentrated on
     a steam cone during 1 hr. to small volume, cooled, and diluted with H2O gave 3
     q. crude 1,4-dihydrobenzo[f]quinoline-2,6-dicarboxylic acid (XXXII) di-Et
     ester(XXXIII), m. 157-9° (EtOH, then MeOH). XXX (1.8 g.) in 80 ml.
     H2O and 80 ml. EtOH containing 2.5 g. 10% Pd-C hydrogenated 1.5 hrs. at
     50°, the filtered solution evaporated, and the residue treated with aqueous
     K2CO3 gave 0. g. XXXIII. Similar reduction of XXX with NaBH4 in MeOH in lieu
     of EtOH ave a Me Et ester of XXXII, m. 182-5° (MeOH). XXIX (10 g.)
     reduced with NaBH4 in MeOH as above, the mixture concentrated, cooled, diluted
with
     H2O, and the product (4.5 \text{ g.}) triturated with MeOH gave 3.7 \text{ g.} XXXII di-Me
     ester (XXXIV), m. 215-18° (decomposition) (MeOH). Triturated XXXIV (3.0
     g.) and 2 g. 10% Pd-C in 350 ml. xylene distilled 5 min. to remove traces
     H2O, the residual mixture refluxed 1 hr., filtered while hot, the filtrate
     evaporated, and the residue triturated with a little MeOH gave 2.0 g. XXXI
     di-Me ester (XXXV), m. 145-7° (MeOH). Crude XXVII treated with
     excess PhCH2CH2NH2, concentrated, the residue treated with H2O, the gummy
precipitate
     filtered off, and triturated with EtOAc gave crude
     3-chloro-N, N'-di(β-phenylethyl)benzo[f]quinoline-2,6-dicarboxamide
     (XXXVI), m. 190° (decomposition). Crude XXXVI (4 g.) in MeOH treated
     portionwise with NaBH4 until spontaneous reaction ceased and then with 5
     g. addnl. NaBH4, the mixture heated 0.3 hr. on a steam bath, concentrated, the
     residue diluted with H2O, extracted with EtOAc-Et2O, the extract dried and
evaporated,
     the residual gummy solid refluxed 1 hr. in 350 ml. xylene containing 2.5 g.
     10% Pd-C, the mixture filtered while hot, and the filtrate evaporated gave 0.3
     q. N,N'-di(\beta-phenylethyl)benzo[f]quinoline-2,6-dicarboxamide, m.
     217-19° (EtOAc). XXX (7.5 g.) in 300 ml. EtOH and 50 ml. H20
     containing 8 g. 10% Pd-C hydrogenated at 45 lb./sq. in. at 70° (a
     pressure drop of 7 lb./sq. in. occurred gradually during 5.5 hrs.),
     filtered, the filtrate cooled, concentrated, the residue shaken with Et2O and
     aqueous K2CO3, the Et2O layer separated, dried, evaporated, the residual oil
(6.2 g.)
     taken up in 30 ml. anhydrous N2H4, the solution refluxed 3 hrs., cooled,
diluted
     with 200 ml. H2O, filtered, and the filtrate kept several days at
     0° gave 4 g. hexa- or octahydrobenzo[f]quinoline-2,6-dicarboxylic
     acid dihydrazide hemihydrate, decomposing from 255° (EtOH). XXX (5.0
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g.) treated with 40 ml. ice-cold 90% HNO3 with stirring, the resulting solution kept at 15° by brief immersion in an ice bath during the exothermic reaction (5 min.), poured into 5 ml. ice and H2O with stirring, the precipitate collected, washed with several portions H2O, pressed dry, and triturated with warm EtOH gave 4.3 g. 3-chloro-7-nitrobenzo[f]quinoline-2,6-dicarboxylic acid (XXXVII) di-Et ester (XXXVIII), m. 192-4° (EtOH). XXIX (12.5 g.) nitrated with 115 ml. 90% HNO3 as above except that the solution was allowed to stand and warmed gradually to 20° during 9 min. after the period of slightly exothermic reaction, the product isolated as above, and triturated while moist with MeOH gave 13.3 g. XXXVII di-Me ester (XXXIX), m. 229-31° (decomposition) (EtOAc). XXXV (2.0 g.) nitrated with 35 ml. 90% HNO3 as above (the solution was swirled in an ice bath until the moderately exothermic reaction was complete), the solution kept 6 min., hydrolyzed with ice H2O, and the product triturated with MeOH gave 1.8 g. 7-NO2 derivative (XL) of XXXV, m. $202-4^{\circ}$ (decomposition) (EtOAc). XXX (6.4 g.) and 2 g. 10% Pd-C in 400 ml. AcOH hydrogenated 0.5 hr. at 45 lb./sq. in. at $60-70^{\circ}$ (when 3 mol. equivs. H were absorbed the reduction was interrupted), the mixture heated to 100°, filtered as rapidly as possible, the catalyst washed with several portions AcOH and EtOAc, the combined filtrate and washings evaporated, and the residue triturated with MeOH gave 2.4 g. 2 - carbomethoxy - 3 - chloro - 7 - aminobenzo [f] quinoline-6-carboxylic acid lactam (XLI), m. 304-6° (decomposition) (EtOAc); attempts to dechlorinate this compound were unsuccessful. XXXVIII (2.1 g.) and 3 g. 10% Pd-C in 150 ml. AcOH hydrogenated 1 hr. at 45lb./sq. in. at 80° [absorption of H occurred in 2 stages, partly (3 moles) at room temperature and the remainder (1 mole) at the elevated temperature], the filtered solution evaporated, and the residue triturated with EtOH gave 0.4 q. 1,2-dihydro-2-carbethoxy-3-oxo-7-aminobenzo [f] quinoline-6-carboxylic acid lactam, m. 294-6° (decomposition) (treatment with dilute aqueous NaHCO3, then EtOH). XXXVIII (4.2 g.) and 6 g. 10% Pd-C in 400 ml. EtOH hydrogenated at 45 lb./sq. in. at room temperature (4 moles H absorbed in 15 min.), then hydrogenated at 75° (an addnl. 3.5 moles H absorbed during 3 hrs.), the filtered solution evaporated, the residue treated with cold dilute aqueous NaHCO3, the resulting semisolid extracted with 2 1. Et2O, the dried, evaporated, the residual oil (1.6 q.) treated with a little EtOH, and the resulting solid triturated with EtOH gave 0.5 g. 1,2,3,4,4a,5,6,10b-octahydro-2-carbethoxy-7-aminobenzo[f]quinoline-6carboxylic acid lactam, m. 232-4° (sinters at 223°) (EtOH); the compound appeared to be unstable. XL (1.8 g.) and 1 g. 10% Pd-C in 300 ml. AcOH hydrogenated 16 min. at 45 lb./sq. in. at room temperature, the filtered solution evaporated, and the crystalline residue triturated twice with MeOH gave 0.9 g. 2-carbomethoxy-7-aminobenzo[f]quinoline-6-carboxylic acid lactam (XLII), m. 304-5° (decomposition) (MeOH). MeOH-triturated XLII (0.3 g.) refluxed 0.5 hr. in 250 ml. xylene containing 0.5 g. 10% Pd-C, the mixture filtered hot, and the filtrate evaporated gave the purest sample of XLII, m. $305-6^{\circ}$ (MeOH). XLI (1.0 g.) in 100 ml. MeOH treated with NaBH4 in small portions, treated with more NaBH4, the mixture heated 15 min.

on a steam bath, cooled, and diluted with H2O gave 0.9 g. XLIII, m. 257-9° (decomposition). XLV (0.5 g.) and 1 g. 10% Pd-C in 280 ml. xylene refluxed 1.5 hrs. and the filtered solution cooled gave 0.1 g. XLII.

XLII (0.3 g.) and 100 ml. concentrated HCl refluxed 0.5 hr. gave 7-aminobenzo[f]quinoline-2,6-dicarboxylic acid lactam, m. above

360° (MeOH). Infrared data were given for the products. IT 95003-39-7P, Nicotinamide, 2-hydroxy-6-methyl-N-phenethyl-5-phenyl-RL: PREP (Preparation)

10/537,719

(preparation of)
RN 95003-39-7 CAPLUS
CN 3-Pyridinecarboxamide, 1,2-dihydro-6-methyl-2-oxo-5-phenyl-N-(2-phenylethyl)- (CA INDEX NAME)

$$\begin{array}{c|c} \text{Me} & \overset{H}{\text{N}} & \text{O} \\ & & \text{C-NH-CH}_2\text{-CH}_2\text{-Ph} \\ & & \text{O} \end{array}$$

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